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ON THE EDUCATION OF BACKWARD RACES

A PRELIMINARY STUDY

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I. INTRODUCTION

The intercourse of stronger and more advanced with weaker and more primitive races has been marked progressively by features corresponding, first, to merely physical contact, in which brute force hewed a way for trade and commerce; later, to empire and colonization, with more lasting psychic

influence; and, more recently still, to systematic educational effort, wherein the dominant power sought to engraft its culture upon its dependencies. While, of course, these stages cannot be marked by definite periods, they serve to indicate a natural line of review in treating of some of the questions arising from racial intercourse. It is the purpose of this paper, after briefly reviewing the conditions and results of the earlier phases, as exemplified in some of the best known fields of colonial enterprise, and discussing more fully the present state of educational effort, to enquire into the methods best suited for the advancement of stagnant and backward races, in the light of the best researches of psychology and anthropology.

II. On the Psychic Unity of the Race

Even at the present day it is urged by many writers that certain races, because of their essential inferiority, their almost sub-human, or, at least, sub-Caucasian, mental endowment, are incapable of receiving more than a veneer of any higher culture. The question of the psychic unity of the human race is still an open one, and waxes warmest in this country, naturally, over the African. While it cannot here be discussed at length, mere mention may be made of the facts that seem overwhelmingly to argue against intrinsic difference. Many investigators, such as Peschel, Darwin, Haddon, de Quatrefages, and others, cite the prevalence, in widely sundered regions, of such customs as counting on the fingers, gesture-language, ratification of friendship by exchange of names, building of memorial cairns, couvade, and the widespread practice of circumcision. Darwin particularly emphasizes (Descent of Man, Pt. I, c. 7) the similarity between the races of man as shown by the universal pleasure afforded by the same amusements and by bodily decorations, as well as by the fact that the same emotions are similarly expressed in face, gesture, and cry, whereas different species of monkeys respond to the same stimulus quite differently. So, too, as to language, the essential point being not any particular form or derivation of speech, but the mere capacity for articulate expression of thought. Nor are even classifications according to cranial measurements decisive, for under the same cephalic index are grouped peoples that none would equate in other respects; as, for example, Bretons and Kalmucks, Turks and Javanese; while, on the other hand, in Scotland and in Switzerland, with races so similar in many respects, the cranial proportions are different enough to justify separate classification. No more can alleged pathological variations afford a final answer. The negro, for example, is generally found to be immune to yellow fever, but very susceptible to cholera, tuberculosis, epilepsy,

and venereal diseases. A recent epidemic of varioloid in the West Indies, under the writer's observation, left the whites untouched, but affected alike the blacks and the colored, even the lightest mulattoes. But pure whites of more than a very few generations of tropical residence are rare, so that there is reason to believe that such differences are mainly climatic and environmental. And in these islands, moreover, is found extensive refutation of the theory of non-fertility of crossed races; for, despite the enormous infant mortality, the colored population is steadily on the increase, and, under fair conditions, shows good average mentality. But of this latter point again. Darwin long ago showed the worthlessness of those testimonies of travellers and traders to the effect that Australian and Tasmanian women rarely bore children to European men. "The half-castes," he tells us (*loc. cit.*), "are killed by the pure blacks; and an account has lately been published of eleven half-caste youths, murdered and burnt at the same time, whose remains were found by the police."

As to morals and religion among savages, we may choose between the denials of any trace thereof by travellers and traders whose observation must needs have been superficial, and the sanguine affirmations of more profound students who perhaps have not escaped the danger of "reading into" the savage psychology much that was merely subjective. However, as the facts referred to later will show, there has been much confusion of standards and much misunderstanding of points of view. Beyond doubt, many savage races have a well defined notion of property rights, of chastity, and of connubial fidelity. Careful investigators have rarely failed to find ultimate, conceptions of a deity, but religion and morals pertain, in the native mind, even more than with us, to different realms.

In general, that we, as educators of backward races, are not justified in setting out with *a priori* notions of their mentality is implied in the conclusions of Professor Boas.

"Our considerations," he says, "make it probable that the wide differences between the manifestations of the human mind in various stages of culture may be due almost entirely to the form of individual experience, which is determined by the geographical and social environment of the individual. It would seem that in different races the organization of the mind is on the whole alike, and that the varieties of mind found in the different races do not exceed, perhaps not even reach, the amount of normal individual variation in each race" (6, p. 460).

III. Physical Contact of Races

Approaching the subject, then, without any foregone conclusions, we have first to note briefly the cultural effects of what we have called the physical contact of higher and lower races,

to enquire what civilization brought to paganism in its early years of expansion over sea.

The story of the *Tasmanians* is well known; how that, first introduced to the white man at the beginning of last century, they were found populous and thriving, and many worthy observers judged them by no means incapable of much development; how that they were steadily exploited and even actually hunted and shot as game; and how that, when but some ten dozen were left out of a population of several thousand, they were deported to Flinders Island, where, in 15 years, from 1832 to 1847, they decreased to 46, while during that period scarcely a dozen children were born. The last survivor died in 1876 (Bonwick, Last of the Tasmanians, 1870).

Though not deported, the *Maoris* of New Zealand decreased steadily from 1839, when the islands became a British Colony. In 1841 they were a vigorous people of 100,000, making a sturdy stand against the land-grabbing of the 5,000 settlers; in 1852, when a constitution was granted to the Colony, they numbered 56,000, the settlers, 27,000. The decrease has gone steadily on, and their struggle for their homes continued, until, in 1871, "the natives," says Woodward (77, p. 279), "were forced, though sullenly, to admit their defeat, and the islands have since that time had peace." Under better conditions the natives are now comparatively prosperous, and number some 35,000.

In the *Sandwich Islands*, according to Darwin's quotations (*loc. cit.*), the population decreased from some 300,000 at the time of Cook's discovery, in 1779, to some 50,000 in 1872, over 80% in a century of intercourse with civilization, and is still rapidly declining. Whether the causes were internecine war, profligacy, change in habits of clothing and diet, or what, the Kanakas, who were described early in the last century as the most civilized of all the Pacific Islanders, are paying with their lives for the blessings of our culture.

Romilly (66, c. 9) tells how civilization dealt with the *Melanesian* tribes; how, after the introduction of cotton into Fiji and of sugar into Queensland, the Papuans, New Hebrideans, and Solomon Islanders were decoyed, captured, clapped under hatches, and carried off to the new plantations, there to work for a useless pittance until they died of homesickness.

Forty years ago, according to Hunt (41, c. 4), the *Fijians* might have been considered among the finest specimens of natural manhood in the South Pacific islands. They had a high ideal of chastity, and exercised great love and care toward their children. Polygamy tended toward chastity, the same mother seldom having a child oftener than once in three or four years, and it was quite contrary to the Fijian ideas of delicacy for a man ever to remain under the same roof as his wives at night.

With the intrusion of the whites, monogamy was enforced, with distribution of the plural wives, and consequent laxity. Through punitive expeditions, and through measles, catarrh, whooping-cough and other ills attendant on the enforced change in customs, the population fell in 1874-1897 from 150,000 to 99,770, and it was found necessary to appoint, in 1893, a "committee of enquiry into physical deterioration." Moreover, monogamy, introduced so suddenly, has increased the work of the women and lessened their care of the children. To wear native clothing, to make native cloth, to make the native beverage, to smoke tobacco, to wear long hair, to wrestle, play ball, and not to wear shirt and trousers and observe Sunday puritanically, were declared offences punishable by law.

In *West Australia* Dr. Gibney, R. C. Bishop of Perth, accuses the

government at the present day, of starving the natives and expelling them from runs, of slackness in checking abuses, etc. The Chief Protector of the Aborigines replies (London 'Times,' May 17, 1907) that no evidence exists for the above charges, but that drink and immorality are destroying the natives, despite efforts of the police to check these evils. In the sixties, he says, measles destroyed more than half the population in the southern section. Wherever the blame is due, the fact remains that drink, disease, and immorality have been co-existent with European settlement, and the natives have decreased in all about 80 per cent. When the colony of Victoria was founded, the blacks were estimated at about 9,000; at the present time there are less than 800, many of which are half-castes (52, p. 349).

Similarly with the extinct Beothuks of Newfoundland, with the Hottentots and Bushmen of South Africa, the Ostiaks and Tunguses of Siberia, and the Veddahs of Ceylon. Some thirty years ago the Patagonians (60, p. 184) were said to be steadily and rapidly decreasing, and with them are perishing many interesting, and, in that clime and environment, useful and salutary customs. Even the hardy natives of British Columbia and Alaska for some years after the advent of the settler decreased in numbers, though they are now slightly on the increase. It is true that many of the races that have thus suffered in the past, as the Polynesians, are now showing signs of recovery, but the fact of the deadly effect of their earlier experiences remains.

Civilization first struck the rich *Yosemite Valley* in 1851, and its representatives were welcomed by the peaceful natives. Before long the miner's greed drove him to encroach on the native's land, and his lust to disturb the native's home. This led to retaliation in the way of stealing horses and mules for food for starving families; war finally broke out, with the inevitable result, reservation, confinement, and inoculation with all the evils, moral and physical, of the conquering race, and to-day, says Galen Clark (24, p. 19), scarcely half a dozen of the tribesmen or their children are in existence.

The whole history of the commercial and political intercourse of advanced and backward races is a story of mutual misunderstanding, and of wanton aggression and provocation, as well as of exploitation, on the part of the former. Take such cases as the following. Among the Australian bushmen, the place where the pubic ceremonies were performed was secret and inviolate, and "the occupation of such a place by white men," says Rusden (69, I, p. 100), "would confound a native as much as the destruction of St. Peter's or Notre Dame would outrage the feelings of Romans or Frenchmen." But profanation of such temples was a light matter in the eyes of the settlers, and reprisals followed.

Again, a certain quartz crystal venerated by the natives as a talisman, was, on pain of death, never to be shown to a woman. A settler violated this law and suffered death at the hands of a tribesman. The slayer was captured and put to death by the English hangman. To the settlers, a citizen had been murdered for tampering with "some nigger's fool stone"; to the natives, a fellow-countryman had died a martyr to the faith (69, I, p. 101).

The foreign and the native ideas of justice, too, frequently conflicted. The native, accused of crime, tells his story from his point of view, the verdict is according to the foreign interpretation of the offence, and thereafter the native is cute enough to tell a story that will bring him better luck. Among the Burmese, for instance, as among the Pondos, penalty is remedial, and the lifelong stigma our ethical code imposes is incomprehensible to the native. Hence, a foreigner in his own country, he is marked as a murderer, a liar, and a thief. No knottier problems of empire exist to-day than those due to the debasing contact of trade and colonization with the sturdy and prolific tribes of Africa, or to the supercilious contempt of western power for the sacred traditions of the Hindu. Such contact is inevitable; but that the result of this "world-process," as Bryce calls it (13, p. 8 *et seq.*), must be the reduction of the backward races to a position "analogous to that which the unskilled workers have held in each one of the civilized nations," does not necessarily follow. This implies the intrinsic and fixed inferiority we have been discussing; we have no right to assume, with the great colonial captains of industry, that the backward races of mankind are destined only to be our hewers of wood and drawers of water. A better analogy is that of a minor undergoing training for entering into his inheritance in the maturity of his powers.

IV. Indigenous Culture. India

Before considering the question of the educational or psychic influence of advanced upon backward races, we should naturally inquire into the life and habits of some of the best known representatives of the latter, to discover what educational material, if any, they possess, what indigenous "culture-stuff" to which the civilization of the western world may apply its best pedagogical methods. Such a line of inquiry, moreover, may reveal some of the causes which serve to retard the progress of such peoples, and thus may further lead to a formulation of some phases of the problem that confronts the educator in these fields.

No better instance of the presence, not entirely welcome and yet, on the whole, necessary and beneficial, of a dominant civilization in the midst of a highly organized primitive society sadly in need of stimulus from without, is to be found than that of the English in India. A study of conditions here is the more instructive as it represents one of the oldest and most successful enterprises of colonization, and as its methods, its successes, its failures, its crying needs, are such as are actually or likely to be, found in most later tropical undertakings.

The facts relating to early education among the Hindus

are largely drawn from Dr. W. I. Chamberlain's 'Education in India,' Dr. Leitner's Report, and Sir H. J. S. Cotton's, 'New India.'

The motive of early education in Aryan India is to be found in the Brahmanistic faith. In such a system of spiritual pantheism, setting up as the highest good absorption into the "All-One," the whole trend of teaching was negative and repressive. In the Code of Manu, dating from the 2nd or 3rd century B. C., the end of education is thus expressed: "Studying the Veda, practising austerities, the acquisition of true knowledge, the subjugation of the organs, abstention from doing injury, and serving the Guru (the spiritual teacher) are the best means for attaining supreme bliss."

In the very earliest days of Brahmanism, the Courts of the Kings were the centres of learning; but later arose colleges of Brahmans, or Parishads, which were constituted by three pandits competent to maintain and transmit the ancient philosophy and religion. To them resorted all who wished to devote their lives to learning in the Vedas. Though these schools stood for no esoteric doctrines, education was so far very select, tending to preserve and widen the breach between the priestly orders and the lower castes. It appears that the Brahmanical teaching was open to, and, in fact, incumbent upon, the next two, the soldier and the merchant, castes; but, as a general thing, since the function of priest and teacher was restricted to the Brahman, and as boys tended to follow the calling of their fathers, the schooling of the industrial classes was mainly in domestic occupations, not even the three R's being given them, it being taken for granted that what was necessary of these would be picked up in the practice of their trades.

Besides this, these lower castes secured in their village communes, instruction in the vast collection of tradition, folk-lore, and proverbs, known as the Panchatantra, dating from about 500 A. D., though reduced to writing much later. It may be interesting to quote one or two specimens of the ethical precepts contained in this body of tradition:

"Be humble, for the tender grass bows itself unhurt before the storm, while the mighty trees are shattered by it."

"Virtue, after which men ought to strive, needs a mighty effort, for a cocoanut falls not through the shaking of a crow."

"The wise man must strive to gain knowledge and wealth as if he were not subject to death, but the duties of religion he must fulfill as if death were already hovering on his lips."

All teaching, of course, was oral, and in the higher schools the pupil learned by rote from the master's recitation incredible masses of vedantic hymns and traditional lore, without being able to understand a sentence. Conformity to a strict system on the part of the teacher, and servile acceptance on the part of the scholar, characterized all these educational efforts. The unchanging past yielded its endless round of stuff for character to the enquirers of an unchanging environment, and only thus could the life of pure thought be as much as conceived. Relations of real interest and love existed between teacher and taught, and discipline was mild, blows and dousing in cold water being prescribed by Manu only as extreme measures. But any departure in thought or conduct from these traditional standards, or, when MSS. came into existence, any attempt to burrow extra-

murally, so to speak, into the sacred lore, was considered a great offence. The lowest caste received no instruction at all.

The influence of Buddhism, from about the 3rd century B. C. to the time of its decline and its exile to the north and east, was not, with its ideals of extinction in Nirvana, such as to change the course of educational thought, even had this influence been permanent. Nor was Mohammedanism, which became dominant not long after the expulsion of Buddhism, of any great effect in turning the course of this theoretical and contemplative system. These Mohammedan schools, which are said to have reached quite a high degree of efficiency in their own way, employed two learned tongues: in the elementary, the Persian, and in the advanced, the Arabic. The former were of commercial value to the Hindus, as Persian was, until 1835, the language of the law courts; but, further than that, little else than the Koran was taught. The Arabic schools, though giving courses in many branches of science, were utterly foreign in spirit as well as in tongue, and were not attended by Hindus at all.

As a result of the government enquiries conducted in the three great Presidencies 1820-1835, it was found that, in Madras, counting the teaching of girls, which was done almost altogether, if done at all, in the home, upwards of one-third of the whole population was receiving instruction; in Bombay, 35,143 pupils out of a population of 4½ millions, with almost no female education; and in Bengal, 13% of the children of school age were being taught at home and in school. Passing over the period of the early caste schools and Brahmanic Parishads, in more modern times, as revealed by these government enquiries, there were two classes of schools, the elementary, or Patasalas, and the Schools of Learning, or Tols. In the former, the course was usually from five to ten years of age, and the studies consisted of the alphabet, traced with the fingers in the sand, palm-leaf writing, numeration and tables of weights and measures, elements of arithmetic and mensuration, and, in the final stage, advanced arithmetic and writing on paper. These schools were patronized mostly by the commercial classes. The teachers were of the writing caste, and were very poorly paid, depending chiefly on gifts by the month or by the term.

Mr. Adam, who was delegated by Sir Wm. Bentinck, in 1835, to conduct the enquiry into native education in Bengal, says of the teachers of the schools of higher learning, and his remarks apply in general to such schools in the other provinces: "I saw men (the pandits) not only unpretending, but plain and simple in their lives, . . . inhabiting huts which . . . might be supposed to have the effect of stunting the growth of their minds, . . . and yet several of these men are adepts in the subtleties of the profoundest grammar of what is probably the most philosophical language in existence. . . . They are in general shrewd, discriminating, and mild in their demeanor. The modesty of their character does not consist in abjectness to a supposed or official superior, but is equally shown to each other" (50, pt. I, p. 87). They were, says Chamberlain (22, p. 22), the visible representatives of culture and religion, and of all the higher forces of the

Hindus. Fees were forbidden by the laws of Manu, and the pandits were supported by gifts and in some cases from the revenue of the land attached to the school. So far, indeed, from fees being charged, it was common for the pupil to be both instructed and fed, and Chamberlain says that the intercourse between teacher and pupil, bound together by common study of sacred books and by close ties of caste, resembled that which Fichte conceived.

In the Panjaub, seven classes of schools were found in existence, and they are typical of the modes of instruction throughout India. These were as follows: (1) The patasalas, or 'sals,' consisting usually of ten to twenty almost naked children squatting under the sacred pipul, marking letters on the plantain, reading and writing in the Hindi and the Mahajani dialects, with sometimes letter-writing and doing "sums" of a simple nature. The hours were from six or seven in the morning to eleven, and from two to sunset. There were no classes and no competition. In the evening the tables were repeated to a monitor. The teacher was usually a Brahman, although a Mohammedan has been known to carry on a school for Hindu boys. No fees were charged, but gifts were made to the teacher on festal occasions, such as the birth of a child in a home.

(2) Maktabs taught by maulvis or munshis who charged small fees for teaching reading and writing in Persian and simple "day's pay" calculations.

(3) Maktabs kept by wealthy individuals at their homes, somewhat analogous to the Renaissance schools at such ducal courts as of the Gonzagas or the Medicis. Boys from the neighborhood attended for a small fee.

(4) Maktabs taught by eminent maulvis, pandits, or faqueers, in groves, by sacred streams, or in village marketplaces. Here the master sat to meditate and pupils gathered to him. Instruction was free, and, in fact, food was often supplied to pupils.

(5) Schools of Arabic and Persian.

(6) Special classes in Mohammedan law, medicine, etc.

(7) Schools in connection with masjids and tombs.

Of the higher sanskrit schools, Leitner says, "As for the mode of instruction, nothing can, in my opinion, surpass the excellence of the system pursued in some of these schools. The memory, the reverence for the teacher and for the subject he teaches, and the love of study, are cultivated; the intellect is stimulated to original adaptation of the subject matter read; Sanskrit is treated as a living language, entering into the thoughts and associations of the pupil, who is encouraged to compose in it, if not to hold extempore discussions in it with fellow-pupils on subjects set by the teacher" (50. pt. I, p. 82).

The instruction of girls was looked after mainly in the home. Early marriage prevented much advance beyond reading the Koran or the Panjabi *Granth*, and for girls to attend "public"

schools was thought highly improper. Yet, though secluded, they led no such cheerless life as is commonly supposed. They had their plays, they sang gaily over their housework, and they joined in the home lessons of their brothers, a pretty and useful practice, but possible only so long as the schools employed the vernacular of the home.

V. The Modern System in India

The subject matter of this section properly belongs to the treatment of educational results in general, but there are certain aspects of the question in India that are in a sense peculiar, so that it is more conveniently dealt with by itself.

From the time when the East India company was first aroused, through the work of the missionaries, to a sense of its duty in regard to education, the still-disputed questions concerning vernacular language and literature, and religious education had to be met. At the close of the 18th century, all three classes of schools,—government, mission, and indigenous,—are found, with constant friction between them. A little translation into the vernacular, as of parts of the scriptures and some text-books, had been attempted, and, in 1784, Warren Hastings sought, by founding an Arabic college at Calcutta, to prevent the decay of Oriental learning, and to create a bond of sympathy between rulers and ruled; but the primary indigenous schools seem to have been left to themselves.

The most important epochs in the development of the new system in India are:

(1) The clause of 1813 in the E. I. C. charter providing an annual appropriation of one lakh of rupees to establish colleges, schools, lectures, and to encourage the pursuit of literature and science; (2) the appointment of a Committee of Public Instruction, in 1823, to administer the above grant, which had practically lain idle; (3) the historic language controversy between the Sanskritists and the Anglicists, a question concerning chiefly the secondary schools, decided in favor of the Anglicists by the famous minute of Macaulay; (4) a dispute more nearly touching primary education, between the Anglicists, and the Vernacularists, the former holding to a "filtering-down" theory according to which the advancement of English education among the higher classes would react on the masses, the latter arguing for the education of the masses through the medium of their own dialects; (5) the despatch of 1854, which recommended the extension of both English and vernacular education, and prescribed the establishment of universities in the presidency capitals, and of normal institutes, as well as increased attention to all elementary vernacular schools, indigenous or other, and to female education, and, finally, a system of grants-in-aid.

The system thus founded has, through the establishment of the three great universities and the affiliation therewith of colleges and technical schools, done much to focus and consolidate national education. Our inquiry is, however, whether, on

either filtering down or vernacularist theory, the system has really encouraged the native educational spirit.

The Commission of 1882 reported, among other facts, the following: primary instruction was being given to over two million pupils in 83,416 schools, but while the school population was increasing at an annual rate of 200,000, the increase in school enrollment was only 70-000. Considerable work was being done in Zenana missions, but less than one per cent. of Hindu girls were receiving school instruction. The greater part of the appropriations was being devoted to the high and middle schools, though the total enrollment in these schools at this time was only about 215,000. The purely indigenous schools contained only 350,000 boys, whereas, if the proportion discovered in 1830 had been maintained there would have been one and a half millions. In fact, indigenous schools were becoming extinct, and moral and religious education was utterly neglected.

The results of these inquiries led to a series of recommendations advising greater attention on the part of the government to primary education, to the training of native schoolmasters, and to the employment of Indian graduates in state colleges. It was also suggested that a text-book on morality and the fundamentals of natural religion be prepared and a course of lectures be delivered in state colleges on manhood and civic duties. This suggestion was not followed. On this question of moral and religious instruction a dispute arose between the department and the missionaries, the latter complaining of unfair treatment in the matter of grants, scholarships, and other regulations, and the former asserting that the missionaries were aiming to reduce all instruction to a religious and sectarian basis. The missionaries, however, declared their willingness to have state colleges transferred to native management.

The report for 1896-7 shows an average annual increase of attendance in the government schools for the previous five years, of some 87,000, and in the aided, unaided, and private schools of about 77,000. It is to be supposed that the rate of increase of school population remained about the same as reported in 1882; so that this shows very little progress made by the system in nationalizing education. During the same period, moreover, the increase in expenditure on higher and on intermediate and primary education was, respectively, 28% and 15.5%.

Evidence taken by the Commission of 1882 from the best classes of native witnesses in the Panjaub, showed that native schools were preferred because of the language used and of the moral and religious instruction. The native teachers were loath to leave their free ways and conform to the rigorous requirements of a grant-in-aid system, but it was thought that, with some relaxation of the code, the *bhais* might be won over, or at least induced to send their children to be trained in normal schools for service in the dharmsalas. The Sikh schools were declared capable of great improvement and extension if properly recognized and developed by government. A Mohammedan representative suggested that teachers of native Mohammedan schools be given a monthly allowance on condition of adding to their Koran and Persian some useful subjects such as arithmetic and geography. But consent of parents and teachers was absolutely necessary, and on no account would the native masters depart from their moral and religious teaching.

Whatever the value of this evidence and these suggestions, they show how far the new system had succeeded in assimilating the old efforts, or in winning the confidence of the old masters. Leitner makes, in substance, the following strictures on the workings of the system as fulfilling the spirit of the Despatch of 1854, his emphasis being on the negative:

"The Department has not secured the assistance of the learned classes in India; in the selection of educational officers, sufficient regard has not been paid to the requirement that they shall have the confidence of the people; useful and practical knowledge for every station in life has not been conveyed to the masses; indigenous schools have not been encouraged by scholarships, by grants, by supervision, by improvement of teachers, by publication of vernacular primers, etc.; the native's mind has not been directed beyond mere government employ to wider and more important spheres of usefulness among his countrymen" (50, Precis and Conclusions, ch. C).

And in another connection he says:

" The object of indigenous schools is education for its own sake or preparation for the work of life; that of the Government schools is examination and employment under Government. . . . . The continuance of indigenous schools is practically a protest against the Government system, and seems to be, in the native opinion, a survival of the fittest" (50, pt. IV, pp. 13, 15).

The Governor's note, after a tour of inspection in 1872, said:

"Boys of every grade and class of life are forced into the same mould, have to pass through the same educational course; a consequence being that all those to whom it is unsuited—a majority—often decline to attend the Government schools" (50, Precis of Gov't Records, ch. A).

In the chapter on 'The Social and Moral Crisis,' in his 'New India,' Sir H. J. S. Cotton thus indicates some of the tendencies of officially controlled education:

" The habits and opinions of the people are modified, and even their mode of life is changed, but the hereditary tendencies by which the progress of the race must be determined, are left untouched. There is no power of guidance or consolidation. . . It is not possible to effect permanent good by educational establishments which are in the hands of a foreign power. . . . It is not possible to successfully disseminate western ideas through an official channel" (26, p. 205).

And in showing the contrast between the school or college life and the home life of the Indian pupil, he says, in effect, that the very text-books are often violently opposed to the spirit of the home religious traditions, the boy grinding at some scathing exposition of idolatry and priestcraft, while the mother feeds the flame on the family altar.

" The professors of the Department deliver their lectures on Milton and Mill as a magistrate dispenses justice, . . . but make no attempt to exert a moral influence on their pupils; . . . the moral character is left to be moulded by the home associations without any attempt to improve or modify these associations" (26, p. 218).

The Directors' reports for several years following the introduction of the system into the Panjab acknowledge the absolute failure of the efforts to absorb and adapt the village schools, and this chiefly, Dr. Leitner claims, because of interference with the religious teaching and too sudden disturbance of the primitive conditions.

At the very best, the formulation and direction of an educational policy has generally fallen, in India, as in many fields of colonizing enterprise, into the hands of political administrators, who, however zealous and sincere, could never reach an inner point of sympathy with the native beyond the conception of so adapting western administration as to qualify him as soon as possible for Anglo-Saxon citizenship. Only within the last year (1907), for the first time since India passed to the direct control of the Crown, have natives been called to a place on the council of state. Mr. Morley has been bold enough to depart from precedent, so precious to the English mind, by appointing to the Council Krishna Gupta, a Hindu official, of high standing, and Saiyid Husain Bilgrami, a Mohammedan scholar and thinker. The London "Times," commenting favorably upon the appointments, dwells on the fact that only the very exceptional statesmen, such as Gordon was, can ever arrive at anything but an external acquaintance with things oriental, or fully appreciate a situation from the native point of view.

Again, while the best class of Hindus and Mohammedans are perfectly alive to the fact that the youth must one day choose between clinging to and departing from the old faiths and customs, they are determined to resist any forcing of foreign ideas upon the child. The complaint in many sections of India that state aid is granted to schools that enforce Christian teaching, is, if well founded, as just as that of the non-conformists in England and Wales. However much we may sympathize with missionary efforts, we must admit that, in fairness to all, Christian instruction, as well as Brahmanical, Buddhistic, or Islamic, should be entirely voluntary. On the other hand, the non-moral system of the government is revolting to the whole trend of the Hindu mind, and its fruits are seen in the growing up of a generation without moral or religious basis, as Chamberlain quotes, "with no landmark on earth and no lodestar in heaven" (22, p. 102).

A private letter, recently published in the London "Times," from an Englishman in India well-versed in the situation, emphasizes the wisdom of using native reverences and customs and developing them. The feudalism of the old aristocracy, which the native reveres and obeys, the old baronial council, and the village Panchayat, are, in their own sphere, effective instruments of law and order. A return in a measure, the

writer maintains, to the old paternal system, would go far toward solving the present question of unrest.

VI. Indigenous Culture in Africa

We shall now turn to ruder scenes of colonial enterprise, regions where it might well be questioned if there is anything indigenous that is not wholly vile, and if the educator's first task is not to create a *tabula rasa*, so to speak, and to start anew. Naturally the Dark Continent first looms before us with all its problems. And here we shall treat only of some of the principal of the Bantu and Negro races that appear, in the light of the researches of many careful observers, to have developed some degree of social and pedagogic system. Traces of such systems are not wanting among even such aboriginal stocks as the Vaalpens, Bushmen, and Hottentots, but want of space forbids our examining them in detail. Full accounts of these peoples are found in several works included in the bibliography.

Bantus. That part of the continent lying south of about 4° N. lat. is largely occupied by the great Bantu family (30, Vol. II, see map), loosely called, in South Africa, the Kaffirs. They have a well developed tribal system, keep flocks and herds, smelt iron, mould pottery, carve wood, and have shown considerable ability to adopt improved methods of agriculture (71, pp. 52, 85).

From the Cape to the Limpopo River, the same general tribal organization prevails (71, p. 21). The chief is the central figure of the tribe, property reverts to him, and he is the one who must exact blood revenge, for to him the blood of the tribe belongs (16, Rev. p. 270). Most tribes have an advisory council with a chief counsellor. The heads of villages come next in authority, and after them heads of families. Serious crimes are referred to the chief directly, failure to do so being punished by a fine. By the *spoor* law, a village or kraal is held responsible for the crime of an individual member, until he is delivered up (16, Rev., p. 273). While the Zulus have a more martial form of this system, a sort of military despotism, the Besutos and Bechuanas are rather more democratic, allowing freedom of speech in the tribal assembly (10, v. 2, p. 189, *et seq.*: 71, ch. 2), and making reparation for murder to kindred of the victim. Among the Zulus, no tribesman is paid for anything, as, in a sort of feudal fashion, his possessions belong to the chief, but he may receive presents in return. Among the Bechuanas "debts never die" (71, p. 41).

The way to the Kaffir's heart is through his cattle. They are his chief love, and about them centre no end of ceremonial observances. Dancing oxen, for example, are common. Cattle also form the standard currency. As an example of the fondness of the Kaffir for his ox, it is said that, whereas the work of tilling the fields was formerly considered beneath the dignity of the lord of the soil and was left to his wife, on the introduction of the plough drawn by oxen, the husband began to devote himself to agriculture (71, p. 85). The Kaffir, moreover, loves his home and his valley, and in his tribal location, says the compilation of the South African Native Races Committee, is the best behaved fellow in the world. A tactful magistrate with half

a dozen native constables can keep in order a district of 60,000 people (71, p. 47).

Monogamy generally is the standard, though it is common for the chiefs and leading men to have several wives, to "add rafters," as they say, to the main house, over which the leading wife, usually the first married, presides (8, p. 23). Such polygamous practices are, it is well known, directly related to their strict marital forbearances, and there is no evidence of promiscuity. This fact, along with the prohibition of marriage within any traceable degree of consanguinity, probably has much to do with the virility and productiveness of the race. The Cape Colony colored population increased, during the period from 1875 to 1891, some 25%, and that in the face of systematic attempts on the part of Boer and Briton to exploit them (71, ch. 1).

It is the *Negro* family, centered chiefly about the Gulf of Guinea and the central western coast, that has, from the time of John Hawkins, furnished the material that now constitutes, in such large measure, the wards of Britain and America in the West Indies and the southern states. And with the briefest glance at the history of the slave trade, we can easily see how little it is to be expected that any great body of tradition, which might form a basis for education, should remain among these people. The best of their tribes deported, and the weaker elements left the prey of stronger races, it is at least suggestive of the possibilities of even the Negro section of the so-called African race that they have not only survived but are actually increasing.

Cust says (30, p. 165), "No Negro sage or legislator ever rose up to show the way to better things, and no chronicler or bard has recorded the past. So, with the exception of their wonderful languages, which are in themselves a history, a chronicle, and an essay on logic, and, if rightly handled, serve as a touchstone of what they knew, or where and by what channel they came to know any science, or art, or product, or moral sentiment, they have nothing to offer to the inquirer or the speculator. Chronic warfare, absence of public opinion, absence of manufactures and sea-borne commerce, absence of any book-religion, absence of clothes and the common decent forms of life, presence of cannibalism, slave trade, human sacrifice, cruelties beyond description, fetichism and witchcraft, with the wildest and most monstrous consequences, have been from time immemorial to the present day the characteristics of Negro-land." Heli Chatelain points out as the chief causes of the present backward condition of Africa, racial seclusion, and the practices of polygamy, slavery, and witchcraft (23).

On the other hand, while Cust is probably correct in regard to the positive factors that have served to retard progress, his low estimate of Negro culture is not in agreement with the testimony of some other competent authorities. Professor Boas tells us that "the metal industry in Africa reached its highest development on the Guinea coast, where the palace of the King of Benin was decorated by bronze castings which in boldness of form and difficulty of execution challenge the work of our most skilled artisans." And again, after speaking of

the remarkable development of trade and of judicial procedure, he mentions, as an example of the organizing and governing capacity of many tribes, the Lunda empire in the Congo region "which equalled in size the large European states, held together by the personal force of an emperor (just such a leader as Cust says never arose) whose power was limited by a curiously intricate constitution based largely on a system similar to the feudal system of the Middle Ages" (5).

The Mandingoes, the Krus, and others of the same region, are uniformly described as peoples of fine stature and fair mentality. Untainted by "culture," their morals are rigid, even according to cultured standards. The Mandingoes inflict death on the murderer and the adulterer, but the adulteress is only whipped. Slander and disrespect to parents or the aged is punished by a fine. Immorality, apart from adultery, was practically unknown (quoted, 6, p. 45).

Among the Veis of Sierra Leone, a murderer may be killed by a relative of his victim, but no penalty is imposed for the killing of one's own relative. Idle good-for-nothings may be killed with impunity by a brave, patriotic and industrious man. If a slave is caught in theft he is let go, but a free man is branded for stealing (57).

The Sereres, north of the Gambia, are a fine, well-grown race, not unpleasant in features. They are independent and comparatively industrious, cultivating rice and corn, and raising cattle. The king is supreme, but is represented in subordinate districts by a 'madunget,' or governor, who again can appoint agents or 'jarrafs.' Murder and adultery here also are capital offences; the goods of a thief are confiscated and handed over to his victim (6, p. 46).

A general trait of all these barbarians is their improvidence. In many other ways, too, they resemble children of our race. Thus they can appreciate human and animal pictures, but not landscape, and have no idea of perspective. Yet it must be remembered that children and savages, though not capable of much abstract reasoning, are exceedingly quick to detect inconsistencies, and to draw analogies. Dr. Nassau (61, p. 84), tells of a Christian woman who was rebuked for having a fetich suspended in her bedroom. Her husband, a partly educated Sierra Leone negro, wrote an angry letter to the missionary justifying his practice. Said he, "You white people don't know anything about black man's fashions. You say you trust in God, and yet you put an iron rod over your houses to save yourselves from death by lightning. You call that 'electricity' and 'civilization.' I call this charm of mine 'medicine' to save my wife from death through the arts of those that hate her, and you call me a heathen." Dr. Nassau admits the difficulty of making the difference clear to the native.

Child training among the Bantus and negroes is mostly free and imitative up to the age of puberty. As a rule the Kaffirs love their children. If a mother dies, the grandmother cares for the child and even suckles it. Education might be said to begin at birth, for the stoical behavior of the women during

parturition is believed to have a direct influence on the courage of the children (51, p. 83). After weaning, which, of course, is often quite late, comes the novitiate. The boys are formed into a sort of class or corporation, and instructed in the ancestral customs by a tribesman of influence. This seems to be a veritable school, for the families provide for the support of the pupils and pay in ivory for their clothing. Next comes the discipline of the cotla, or forum (51, p. 84), a rhetorical training necessary to correct the perverse dialects of childhood. The Bantus are very fond of public speaking, a characteristic, also, of the west-coast negro, and the persistence of the trait is seen to-day in the volubility of the West Indian lawyer.

An exquisite picture of Kaffir child-life is that in Kidd's book, "Savage Childhood." The dawning of self-consciousness, and the gradual extrication from the confusion of the self with the clothing, the shadow, the likeness, the name, one's actions, etc., are very human processes, and we cannot but think that if only this bright naïveté could be kept from becoming covered by the dull crust of custom, that fatal arrest after puberty might be, to some extent, at least, prevented. That the Bantu youngsters are not without imagination is seen in their games. Before the missionary they appear dull and unresponsive; but when no stranger is about, they delight in playing missionary, holding a play service, singing hymns, and mimicking the padre's bad dialect. The insistence of the motor idea is strong in the native; he likes to play games involving motor skill, is fond of acrobatic tricks, of mimicking animals, and delights in dolls and clay animals. Cunning and imitation are precocious faculties; imagination is later, and fades after puberty, though not wholly, as is seen in some of their metaphors. For instance, the Zulus have an expression for "far, far away," which means literally, "there, where one cries, 'Oh, mother, I am lost'" (46, p. 74). But curiosity is meagre, as there has been so little to stimulate it. They have a keen sense of rhythm, more so than of melody, and as to color, they apperceive it in the small rather than in the large, in the flower, not in the landscape. Notions of truth, tricks and excuses, childish fears and ambitions, are much the same as with our own children. In fact, the whole picture is that of an intensely human little animal, decidedly attractive, and one feels pity that it should grow up into an unattractive and troublesome Kaffir problem.

Among the Veis of Sierra Leone, the children from the cradle are taught the native legends and the songs of the braves, and very early the boy begins to carry the bow for his father. Then he gets his target practice, and at twelve begins his schooling with a study of the Vei alphabet. At fourteen he enters the tribal school, the Bellee or *Zauberwald*, described below (57).

Pubertal Customs. While the formal training of savage childhood varies all the way from apparent utter neglect to strict training in the occupations of the father or the mother, in all the well organized tribes there is a uniform emphasis laid on the arrival of puberty. Here culminates all the previous

training, or here begins the most solemn and sacred preparation for citizenship or for priesthood. From this period the parent no longer indifferently suffers his child to attend the mission school, and this is the crucial point that so many promising mission pupils fail to pass. For on this stage of life is concentrated the whole force of tribal tradition and prejudice, and of the mysteries of this period inquirers can find out least. But of this node of life, so universally significant in all races, savage or civilized, when manifold new relations of existence, physiological, vocational, and the more subtle psychic ones, burst upon the youth, it behooves all educators to take knowledge, and particularly those who labor among primitive peoples. Some account of the Bantu and the West African pubertal customs, so far as ascertained, should be given.

Among most races, at this period, or on the approach to it, the sexes are separated, and kept strictly apart until the pubic rites are over. The account given by Büttikofer (15, II, p. 302, *et seq.*) of the *gree-gree bush* (*Zauberwald*) among the Veis of Liberia gives a good idea of these "boarding schools." (See also 57.) At about ten years of age the youths and maidens are secluded in separate and secret *gree-grees* in the depth of the forest, under the respective instruction of old men and old women. Here the boys receive a strictly Spartan training in endurance, in warfare, and also in the industries, law, politics, and religion of the tribe. They are taught, says Büttikofer, in all cases to courageously protect the oppressed and to struggle against wrong. All are circumcised on entering, if the rite has not been performed in infancy, and all go naked during the months or years of their secret training. But the most striking part of the description is that the pupil is taught to believe that, on entering this house in the forest, he is swallowed up by the spirit of his ancestors and is born to a wholly new life. Accordingly he receives a new name and, on entering public life again, must learn all things anew. It is verily a new birth and a new existence in which the youth enters into the inheritance of his fathers.

A special feast celebrates the close of the novitiate, when the "graduates" take part in a masked dance, and it is at this time, in some tribes, that the rites of endurance take place. Only such as have been through this training can take part in the councils of the tribe.

The girls are taught in their *gree-gree* bush—*sandee*, the Veis call it—song, games, and dances, as well as all manner of household duties, net and basket making, etc. The songs are said to be often lewd, but the maidens in their daily converse are modest and chaste. The burden of the teaching, other than the industrial, probably emphasizes, as among the Bantus

(51, p. 86), the function of motherhood, and obedience to husbands. We might well compare here Herbert Spencer's strictures on our own educational system as one devised only for a race of celibates, or for monastic orders.

But this doctrine of wifely obedience does not mark the scope of the womanly function in the tribe. Among all these more or less unspoiled natives, the motherly influence is paramount as a final court of appeal. This is the stronghold of conservatism, and from the mother often proceeds that blank opposition to all missionary efforts. Miss Kingsley's studies led her to recognize the greatness of this influence. Among the Tuaregs, a superior race in the French Soudan, A. H. S. Landor tells us, woman is considered the equal, if not the superior, of man. In youth she is educated better than her brothers, and, as a wife, is free to go and to do as she pleases, provided she does not neglect her household duties. She takes a leading place in council, even deciding for peace or war, and so much authority has she gained that she has been able to impose monogamy upon the Tuareg people, Mussulmans though they are (49, II, p. 326).

Reference might be made to educative customs in many other parts of Africa, but the features of most importance in the native system have been pointed out and further mention will be made in other connections of some social regulations that are widespread. Customs vary widely, however, even in the same group, as do also grades of intelligence and educability, and the most we can do in a brief sketch is to emphasize the pivotal points that should most concern us as educators, remembering that educational efforts must take note of, and be planned in regard to, the variations of detail in different environments. Mere description and classification of races and types of culture are the task of the ethnologist, not of the educator.

VII. Other Races

The *Australian* bushmen are generally reputed to be about the lowest in the scale of culture. When the colonists first met them, they were still practically in the stone age, ignorant of agriculture, and unable to count beyond four. Yet they were not without tribal organization, and such chiefs as they had were advised by a council of elders (69, I, p. 91). Their intricate marriage laws and proscriptions attest some degree of mentality, and Rusden goes so far as to say that "in intelligence, good-humor, and loyalty, the despised black race often put to shame the boors among the vaunting Caucasian intruders" (p. 81). Their language had inflections, suffixes, and dual numbers. In their elaborate "corroborees," or dances, the

slightest error in ritual or music exposed the culprit to humiliating taunts (69, I, p. 88). Their rock-drawings and basketry were much admired by many observers, and in the manufacture of their weapons and implements with the aid of only a stone tool, they showed marvellous patience and skill. Moreover, they showed no little adaptiveness, on coming into contact with the settlers, in replacing the stone axe by the iron tomahawk, and the fire drill by the flint and steel. With the last of this perishing race will die out the art of making and throwing the boomerang, for, as yet, it has not been reproduced.

Such are the most prominent features and practices of the various tribes. As to child-training, while infanticide was not uncommon, the natives seemed to love their children, and let them play all day long, drawing in the sand, carving wood and making and throwing toy boomerangs, until they were old enough to get their first lessons in the chase, in which these tribes so notably excel (72, p. 21, *et seq.*). Games were numerous and some very intricate, from cat's cradle to the tribal dances (74, c. 7). Boys were initiated at puberty with a solemn ceremony from even a knowledge of the place of which women were religiously excluded (see 72, chs. 7-9). As a rule, these sons of Nimrod are said—using the present tense for the few that are left—to be manly and liberty-loving, but that they are doomed to extinction there seems to be little doubt.

Melanesians. Though still in the infancy of human development, and in many respects much inferior to the Polynesians, these islanders possess many most interesting customs and institutions. Thomson says (10, IV, p. 343) they are a museum of primitive institutions. They are apt in learning foreign handcrafts, but the usual European traffic has made them more savage and dangerous. They possess considerable skill in sculpture, and are very industrious both as planters and as laborers. How they have suffered from their readiness to work thus for others has already been noticed. (See above, p. 4.)

While no distinct initiative rite for the "making of young men," can be found in these islands, there are secret societies that play an immense rôle in their life. All boys and young men, of any age, who desire social standing, seek admission to the leading 'orders,' and the initiation is usually with painful and disgusting orgies. Seclusion and special diet follow for some months, but this does not appear to have, as in Africa, a pubertal or pre-matrimonial import. Rooted in superstitution, these societies yet survive the introduction of Christianity, serving as a social factor, and often as an ally of law and order. An incident in the Banks Islands, mentioned by Codrington (25, p. 75), shows how a heathen institution may sometimes be brought into service as a factor in civiliza-

tion. Through the teaching of Bishop Patteson, the raising of weapons in a private quarrel had by general consent been given up, and when a native violated this agreement the Tamate brotherhood rose in a body and made night and day hideous until the offender had compromised by the payment of a pig as a fine.

The Melanesians show great fondness for children, but in many islands there is strict discipline. Boys and girls are kept separate, and a curious reserve is practised by the boy, from the time when he assumes dress, toward his mother and sisters. At about twelve years of age he begins to live in the public *gamal*, a sort of club-house. Girls are not allowed to go about alone without a mother or elder friend. Adultery is severely punished. Though harlotry exists, it is largely the result of white influence, and public opinion is against it (25, p. 235), Among the Muruts of Borneo, says Dorothy Cator (17, p. 102), adultery was almost an unknown crime and punishable with death. She further remarks on the gentleness and peacefulness of the communal home-life of these head-hunters.

Polynesians. These tribes, and particularly the Maoris of New Zealand, show curious evidences of intermixture. According to Keane (Chamb. Encycl.), the political organization is based on a distinction between nobles and common people. The Maoris had developed a sort of democracy, but elsewhere feudal monarchies mostly prevailed. Brown (12, chs. 6-7) says slaves were treated kindly, yet often, on solemn occasions, offered in sacrifice. Women were usually drudges, yet often revered as war leaders. Animism is characteristic of the Polynesian religions, but ancestor worship is evidently prevalent. The system of *tabu* is general, and often serves as a moral force. Thus the native can protect his garden, or his wife, by having them placed under *tabu*. Honesty and hospitality are marked features of many of these islanders, especially, it is said, of the Samoans. An instance is related showing the gratitude of King Malietoa when, on receiving gifts on board an English ship, he sent his whole retinue ashore to bring off food-stuffs in return (42, p. 18).

The intelligence of the Polynesians is lively and adaptive. They possess a rich store of mythological and heroic legends, a body of relatively superior arts, and a rather advanced numeration. Oratory and minstrelsy are systematically taught, the bards in particular being very specially trained. These islands were homes of song and pleasure. The French gave Tahiti the name Nouvelle Cythère (51, ch. V).

Infanticide is common, but the children spared are treated mildly, and are taught the occupations of their parents. Pubertal festivals are held, and the circumcision and tattooing cere-

monies are attended with rites of a sexual nature. In general, education is first a family, then a social matter, and pertains alike to body, mind, and morals (*loc. cit.*).

VIII. The Psychic Contact of the Races

When, at length, the conviction dawned upon the western world that the victim of the trader's greed and the colonizer's ambition had a mind and a soul, then ensued what may be called the psychic clash between advanced and backward cultures.

A review of the educational efforts made on behalf of dependent races might occupy the whole space at our disposal, but a few remarks must suffice here. Gleaning from the Special Reports of the Educational Department of Great Britain, we find that schools among the natives of the colonies are established and maintained on the same general plan; namely, mission initiative, followed by State aid on condition of conformity to code and of submission to State inspection and examination. The curricula include the three R's, reading and writing being begun in the native character, with dictation and simple translation, in the 2nd and 3rd grades, at latest, from the native tongue to English, or the reverse. Geography of the world is begun a little later, with special emphasis on the British colonies. English history is put in next. In some West Indian schools, while a few pages of the geography text-book disposes of each of the rest of the earth's divisions, every shire, town, and hill of England is treated in detail. And this is true, to some extent, of the higher grades of the elementary schools throughout the colonies. Religious instruction in assisted schools is usually formal and sectarian, being given at set hours as provided by the code. But for the religious work proper, of course, the mission work must be studied. In this respect, as in all others, the monetary advantage accruing from State aid involves the limitations of a code framed, as a rule, in total and inevitable disregard of the native needs of a particular mission district. In the more regularly settled parts of the colonies, Government education prevails, with, of course, a still closer conformity to the code.

In the whole colony of *Sierra Leone*, there were, in 1900, 77 schools under government inspection, comprising about 8,000 children (33, vol. 13, p. 89). The course of studies embraced, for the grades, reading and writing in English, arithmetic up to or through percentages, grammar and analysis, English history, and geography of the world, with special emphasis on the British colonies. Text-books are of English make. The course in history begins in Grade IV, and in Grades VI and VII is continued down as far as the present time. In Grade

V, a little of the story of adjacent settlements in Africa is inserted. The usual elements of industrial training are encouraged, as gardening, carpentry, and needlework, but there is no mention of native handicrafts, annals, or traditions.

The above are schools for children of liberated slaves returned from abroad and for free blacks born in the colony. It is said that the signs are hopeful for a healthy progress. Commissioner Madden found on his visit of enquiry, in 1841, that, in some schools, even those taught by a native, the first class boys could hardly have been surpassed in reading, writing, and geography, by those of any European school (33, vol. 13, p. 78). But the Commissioner spent only two weeks in the colony (27, p. 174), and his knowledge of the actual results could have been but meagre.

For no African race, says the Report (33, vol. 13, p. 132) has more been done in the way of education than for the *Basutos*. This tribe is conspicuous for industry, shrewdness, and political sagacity, and is showing a keen desire for modern education. In 1903, there were 206 assisted mission schools, with an enrollment of 14,171 pupils, one government school, and one assisted native school established by a native chief. The course in all is on the same general plan. The period of English history up to 1688 is covered in the three highest standards, and the geography of the British Isles is taken up in detail in the highest, standard VII. English and Dutch are the languages prescribed for the grading examinations, and the reading course extends from the infant reader to dialogues in blank verse. The schools of the Paris Evangelical Mission Society seem to be the only ones using the vernacular, exclusively or nearly so, in the early grades, and their report speaks of its use as a great improvement. The industrial work prescribed in the various schools comprises the usual elements. There is no mention of native handicraft.

Theoretically, says the Report (*loc. cit.*), the career of learning is as open to a native Basuto as to a European. But the prevailing prejudice against the educated Kaffir, and the rigid labor conditions which capital has imposed, leave little place for any but the native who is content to be a "cheap labor machine."

In *Natal* very little is being done. There is a class of native schools doing fairly good work, but most are poorly equipped and poorly attended. Writing and "ciphering" are the most popular and best learned subjects. The manual work of the girls is sometimes excellent, comprising, in the day schools, sewing and crochet, and in the boarding-schools, knitting, washing, ironing, etc. The boys' work in these latter schools is also fairly practical, but that of the day-schools the Report calls a farce. Zulu children are prevented by law from attending school against the wishes of their parents (71, pp. 175, *et seq.*, 333).

There are, in all, 13 small training schools in South Africa

at present, at which over 1,100 native youths are trained either as pupil teachers, or for the industries. These are mostly assisted mission schools; but one, conducted on Tuskegee lines, is maintained by natives with the assistance of negroes in America. There is great need of practical hygiene in the schools, for the native death-rate, both infant and adult, is terribly high (2, p. 147, *et seq.*).

In the schools of the Swiss Mission in the Transvaal and of the Scottish Mission at Blantyre in British Central Africa, the vernacular is used in the early grades. Rev. H. A. Junod, of the former mission, emphasizes the need of more suitable reading and spelling books in the native tongue and based on kraal life and native folk-lore. For, he says, many of the folk-tales are of a truly moral character and real literary worth. For higher grades he recommends, and has in part prepared, books of verse and science primers. The native tongues are well suited to certain kinds of verse, and elementary science, Junod thinks, is effective in overcoming superstition (44). Musical and metrical methods of instruction are particularly suitable for these people.

Of education of the wholly uncivilized natives, the sole mention in the Special Reports is one paragraph in the section on West Australia, which says that practically nothing is being done for the few remaining aborigines (33, vol. 5, p. 549). There are but three native schools in the whole Commonwealth, but no account is given of the work they are doing (10, IV, p. 93).

We cannot leave this subject without some notice of the *university extension* efforts in the colonies. These concern secondary and higher education directly, but, as the natives of the colonies find here the only possible continuance of their elementary studies in the imported culture, a brief glance at these higher courses will help us to form an estimate of the benefits of the elementary system.

The Cambridge system offers a good example of these extension efforts. At some twenty colonial centres, in Australia, Bengal, Madras, British Malaya, Straits' Settlements, Ceylon, Mauritius, Seychelles, Shanghai, and several centres in the West Indies, pupils of the high schools sit for the annual examinations of the Cambridge Local Lectures Syndicate.

Here young Brahmins, Buddhists, Mohammedans, Africans and others write side by side with the sons of the Anglo-Saxon on questions prescribed by the examining board at Cambridge University. The subjects of the course comprise the full range of academic instruction in England. For the lower or Syndicate examinations, a 20% pass mark is required in the total, on papers in English, French, Greek, Latin, mathematics, history and geography, and agricultural science. To ensure a pass, the pupil usually takes all the subjects ex-

cept, perhaps, one language. The questions are sent out from Cambridge, and the pupils' papers sealed by the local examiners and sent back to Cambridge to be read. Thereafter is issued a mark-sheet and a detailed report by each syndicate examiner, from which the local instructors prepare their own pass lists and grade their pupils. These instructors are, theoretically, at liberty to teach what and how they wish; but the examination questions are of such a detailed and highly academic nature, not a whit modified for the colonies, that the instruction is practically ruled by the ideas of a group of classicists and academicians, few of whom ever saw the colonies or studied their particular needs. As for the pupil, be he white, black, or brown, the whole arrangement means to him little else than a pass and a grade; but as the higher examinations are approached, law or medicine in an English university looms up large on his horizon.

These higher examinations, the Cambridge Locals, so-called, usually qualify in two years for matriculation into the university, and offer electives from a course comprising six languages, viz., English, Latin, Greek, French, Spanish, and German, history and geography, mathematics, physics, chemistry, biology, physiography, shorthand and typewriting, drawing, and music. The pass lists are published by the Syndicate, a fairly high standard being required. On the part of the colonies, in many cases the government offers a number of scholarships for the highest passes in the senior examination, entitling to study abroad, that is, expressly, in any British university. As a rule, a course in Oxford or Cambridge is the next step.

Three years' teaching under this scheme in the colonies has convinced me that, while it offers ample opportunity in higher education, it is setting as the apex to the whole fabric of colonial education an issue utterly foreign to the native spirit and genius. It is putting within the easy reach of sons of Hindus and of Africans, for example, attainments of which few of them can make any use. For, unless they can by sheer ability wrest a scholarship from their well-nourished Saxon rivals, the native graduates find no farther avenue open to them but some petty clerkship or a position in a hospital or dispensary. To win the Cambridge certificate, they have been obliged to carry along from year to year an increasing burden of scholarship, crippling alike racial naïveté and individual spontaneity, a twofold injury, in a sense, as compared with the results of a similar policy in our own schools. The acuteness of the Oriental and the fervor of the African are forced into the same channel of expression, foreign alike to both; the only alternative is a menial existence in which only the baser qualities find utterance. In a word the native of the colonies must either be left to his lower instincts or have his higher ones replaced by foreign cravings that he has no means of satisfying.

There are not a few instances of native thrift, industry, and self-reliance among both Africans and Orientals, but they owe little to the schools, least of all to the secondary schools. Color and race, it is true, form no bar to commercial and political advancement; a late attorney-general in one of the colonies was a

colored man. In fact political and commercial conditions offer tempting opportunities to African eloquence and legal instinct as well as to Oriental shrewdness. But the system which provides the training for such possibilities leaves no room for development of the primitive, characteristic, traits of an ancient people, and but little room for preparing the masses to appreciate and to meet the problems immediately before them. That little is supplied by some beginnings of industrial training, concerning some special conditions of which a few words should now be said.

One of the best efforts in the direction of *industrial training* has been made among the Kaffirs, at Lovedale, in Cape Colony. Founded in 1841, this school began life with eleven natives and nine Europeans, and had, up to 1887, as graduates or on the roll, 1,520 male students, black, brown, and a few white, instructed in the elements of language and arithmetic and in trades. Further help was given to promising professional students. Over 500 female students beside have been graduated. From the first the interest of the natives in their own schooling was trained, and in 1899 they gave £3,500 to the support of the school. Workshops were set up in 1857 under the encouragement of Sir George Grey, and at present there are twenty-two buildings. The totals of the government grants and the native contributions from 1870 to 1886, were respectively £5,388 and £17,000. The motto of the institution is "Godliness, cleanliness, industry, and discipline." In answer to the question 'Do the natives work at their trades after leaving the school?' Dr. Stewart, from whose report in 1887 these facts are in part taken, says, "Not all; many fail to find work, for when trade is low the white artisan gets the preference." (It must be remembered that the whites in South Africa form about one-half the urban and about one-fifth the rural population.) Dr. Stewart accounts for the 1,520 male students of the institution since its foundation very creditably. Some 500 are in the trades and industries, and some 350 in the more clerical and professional callings. Only fifteen are reported as relapsed to heathenism, though 150 others are "unknown." Fifteen others are called chiefs or headmen, but no information is given as to the way in which they perform their functions. This is really the most hopeful item in the report, for through educated chiefs can the tribes be most readily and permanently influenced. Yet even in this admirable course of instruction appears no place for the arts and the industries that best express the genius of the race. Unless included under the head of "miscellaneous," none of the graduates are reported as engaged in any really native industry. The fact is that, much as such educators may realize the cultural value of the indigen-

ous arts and crafts, it is very difficult, under the present labor conditions, which even tend to discourage native farming and kraal life in order to promote the "compound" system and cheap labor for the mines, for the mission school to find a place in their scheme for the usual elements of an industrial course, much less for the revival of the primitive weaving, drawing, or music. The Basel Mission on the Gold Coast gives a prominent place to industrial work, and in some of their schools the weaving of mats, baskets, and caps is taught, "but in no systematic way and without any industrial scope" (33, vol. 13, p. 298.). The flood of foreign commerce that reaches these shores is replacing all the native fabrics by factory goods.

In Central Africa, the industrial work of the Livingstonia and Blantyre Missions meets more encouragement than in the south, for the native artisan is the only one on the ground. There being few or no skilled white laborers, planters and traders compete for the service of the educated boys of the Missions (33, vol. 13, pp. 317, 324.).

We have not space to go into the industrial question fully, but the situation among the Kaffirs may easily be inferred from a brief account, from the writer's observation, of the difficulties under which native enterprise struggles even in an environment less combine-ridden than that of South Africa.

In the island of Trinidad, with a present population of 280,000, the labor needs of the sugar industry have been for many years met by a supply of indentured laborers from India, so that now fully 25% of the population is of East Indian origin. The indenture is for five years, after which the immigrant usually resides on the estate five years as a free laborer in order to fulfill the conditions of transport back to India. But of late years, fully two-thirds of the 2,500 or more Orientals who thus enter the colony annually, become attached to the country and make it their home. And here comes in the clash with the planter's interests. The "coolie," having served his or her indenture—for men and women alike count as field units—soon sees the advantage of "homesteading" a few acres of crown land over working on the plantation at a shilling or a shilling and a half a day. But such a step, though greatly advancing settlement and the opening up of the island's resources, is fatal to a cheap labor market, and straightway the planting concern lifts its influential voice in protest against any further sale of crown lands unless at such a price as to discourage coolie investment. With the same purpose, too, the mill-owner would fain keep the product which the small cane farmer—the ex-coolie—offers at the factory down to such a price as to make farming little better than day labor. And thus, if the capitalist had his way, we should find raw sugar

exported at a profit even in the face of an overloaded market, but free individual native enterprise throttled, and thousands of the sons of the classic East herded in barracks along the outskirts of the plantations, leading a hopeless, treadmill existence, and acquiring little but the evils of their new environment. True, schools are encouraged by the owners on their plantations, but the product of such conflicting influence and of such a mixed environment is too often a *fac simile* of the "Anglo-Indian" in Hindustan, simply schooled enough to be denationalized. The planter encourages these schools, in which are taught precisely the same subjects as in our own, plus a little Hindi in the lower grades; but he denies any other future to the pupil than the hoe and the cane-knife.

The homestead native, on the other hand, pushing out into the jungle, is no longer under tutelage, and while, doubtless, his greater freedom involves greater liability to social dangers, he is really more accessible to wise teaching, and freer to give expression to his own racial and individual genius. At the present rate at which the immigrants are being domiciled, free villages would soon multiply, and the demand for native artisans such as the schools might train would be greatly increased. In the plantation village, however, architecture beyond the adobe stage is of outside origin; I cannot recall a single instance of an East Indian doing more than the most elementary work in building. It is true, the Oriental is a trader rather than a builder; the brown man sets up shop in the black man's building; but the needs of the lucrative cacao industry would soon make the former sufficient unto himself in this direction, and the buildings required in this kind of farming would lead to improvements in dwellings and in a general advance in the manual arts.

It is argued, as in the case of our own Indians, that the best policy is to do away with all racial segregation and make the tribesman live as much as possible in the midst of modern culture. But the degree of success that has followed this course does not justify its adoption.

But of the American Indian we shall speak later. In regard to the East Indian settlements above mentioned, free intercourse with the "creole," the staple of the population, prevents development of that virility of which the Hindu is capable. Bengali, Madrasi, Sikh, or Mussulman, all are strong in racial spirit and tradition; but under Creole influence they seem to forget all this and to drift toward the towns and the overcrowded professions. The jeweller is almost the only one of the eastern tradesmen who flourishes. In the midst of vast unexplored resources, the immigrant, in contact with the native blacks, settles into contentment with a hand-to-mouth,

sun-basking existence; whereas, apart in his jungle homestead he pushes on to redeem more of the wilderness, and reacts naïvely to the influences of education that are brought to bear upon him.

That these great industrial companies have done invaluable service in opening up new sources of wealth and blazing the trail for the settler, is always granted; no individual enterprise could have held the breach in periods of economic stress. But their position, once the field is open, is analogous to that of the imperialism which rules for the sake of ruling instead of to prepare its wards to wield the sceptre for themselves. To teach a people to exploit their own resources is nobler than merely to glut a metropolitan market or pay dividends. But the time seems far distant when, for example, the native, black or brown, in Trinidad, shall operate his own factories and ship his product, or, in Jamaica, shall farm and market his own inexhaustible fruit lands. In the latter colony, where a great fruit concern has, octopus-like, spread its tentacles over port and plantation, the native has his choice between drawing the Company's pittance and raising his own bunch of bananas to throw, for a still meaner pittance, into the Company's basket.

Trinidad, with its more varied resources, is still free from such a grip, and in the development of the petty farmer is the surest road to economic and political self-reliance. We are told that the native farmers will never co-operate or respect each other's property. The answer is, let them experience the responsibilities of ownership and the needs of mutual adjustment. The Negro farmer in the southern states is amply proving this. But among improvident freedmen, living on tips and odd jobs for which they demand double prices, in affluence one day, stealing a meal the next, or among plantation "villeins" with no prospect, or thought of any, but the cane-field and the barrack and the shilling wage, little co-operation or respect for property can be expected. In Trinidad, every school, Government or assisted, is required to have its garden, school fairs stimulate healthful competition, and if a connection could be established between school garden or farm and the markets, a sturdy native husbandry might soon offer effective resistance to any crushing monopoly.

IX. Results of Educational Effort

Men of the world persistently declare that the only results of trying to educate the savage are that he obtains a veneer of semi-civilization, with an intolerable mass of self-conceit, discontent, and false ambition, or that he ultimately relapses into his primitive condition. The Kaffir the school turns out, they say, is as useless as he is obnoxious. The little darky at his

lessons or his play is a most lovable thing, his face shining with eager curiosity. Even the vanished and vanishing Tasmanian and Australian children often surpassed their white companions before visitors to the mission school. But the settler sees a later stage and tells a different story. And all his prejudices and selfishness aside, there is much truth in his complaint. After puberty, the dead weight of tradition settles down on the native and the jungle and the voodhoo orgy calls him again, or else, casting adrift from his past, he is found afloat on a sea of discontent and disappointment, a useless pedant, who, having tasted the riches of a foreign culture and never learning to appreciate anything in his own, is seditiously clamant for full recognition as a man of Western education and capacity. The schools are, to be sure, not all to blame for this; the whole influence of the white man's presence works in this direction. But an educational policy must take account of this influence. The conditions in India have been described. Nowhere is the danger of the rift between the old and the new, between the tribal traditions and the culture of the foreigner, better seen than here, where the schools of the Brahmans with all their venerable lore, their bonds of affection between teacher and pupil, have been displaced by the new code. Great Britain is to-day contending with conditions which result largely from a lack of connection of the schools on the one hand with the indigenous system, and on the other with the new régime in its industrial and commercial, as well as its social and higher phases.

On a much lower scale, but all the more hopelessly true, such conditions are found among the Africans. Behind the Kaffir youth are no glorious traditions to inspire national pride, and, once awakened to a glimpse of the light of civilization, his whole desire is to get as far as possible, at least in the eye of the foreigner, from the hut and the kraal with their nakedness and nastiness. There seems to be no race on earth that, brought within sight of a foreign culture, shows less trace of race spirit. In Africa or in America the one regret of the half-civilized black is that his hair is not straight and that he cannot rank as a Caucasian. Kidd tells us of a native looking daily in the mirror for signs of that impossible change in the Ethiopian (47, p. 406). In some West Indian colonies colored pharmacists advertise for sale various compounds warranted to take the kinks out of the hair, and publish 'before using' and 'after using' cuts. And thus the unmanning and treasonable self-contempt is fostered in the race, so that every rudimentary principle of morality is liable to sacrifice for the sake of union, on any terms, with the envied complexion.

In the Natal Blue Book for 1904, Mr. J. Stuart, a magistrate in Durban, dwells on the evils of boys, and, especially, girls, leaving their homes for domestic service in the towns, "dressing up," and being taught that the ways of their mothers and grandmothers in the kraal were filthy and immoral. He speaks of the contrast between "the graceful and modest kraal girl clad in little more than a string of beads, and the dressed one mincing, ogling, and smirking in true Haymarket fashion."

Speaking of the effects of formal education, according to European methods, on the Egyptian peasants, Prof. Flinders Petrie says (63), "Some of the peasantry are taught to read and write, and the result of this burden that their fathers bore not, is that they become fools. I cannot say this too plainly; an Egyptian who has had reading and writing thrust upon him is, in every case that I have met with, half-witted, silly, or incapable of taking care of himself. His intellect and his health have been undermined and crippled by this forcing of education."

Speaking of the mark of Western culture on the Straits' Settlements, Hugh Clifford writes, "Incidentally it stamps out much of what is best in the customs and characteristics of the native races against which it brushes; and though it relieves him of many things which hurt or oppressed him ere it came, it injures him morally almost as much as it benefits him materially. . . . What we are really attempting is nothing less than to crush into twenty years the revolution in facts and ideas, which, even in energetic Europe, six long centuries have been needed to accomplish" (quoted, 48, p. 324).

The questions of arrest and relapse, so-called, are very interesting, and might well call for extended treatment. It is inevitable that, where avenues of application are closed to the graduate of the schools, or where the reviving influences have just breathed upon, not into, the stagnation of native routine, the maturing faculties will awaken with them all the ancestral tendencies, and the native will revert, in spirit, if not in outward things, to the ways of his fathers. 'The Russian is a delightful fellow till he tucks his shirt in,' says Kipling; and to such cynicisms is the civilizing process too generally open.

We might speak separately of physical and mental arrest, but such division is too arbitrary. The physiological and the mental precocity of the savage child are well known; whether and in what way they may be related, is a question here only to be proposed.

As throwing into clear light the helplessness of many a redeemed savage, some of the classic instances of relapse may be worth reciting. Sir George Grey gives a pathetic case from Australia.

The boy Grey tells of was a bright and promising lad on board the "Beagle," wearing European clothes, and waiting at the gun room mess. The "Beagle" left him at Swan R., and he became again a savage, wearing war paint and imbruing his hands in blood. "You see," continues Grey, "the taste for a savage life was strong in him,

and he took to the bush again directly. Let us pause for a moment and consider. Miago, when he was landed, had, amongst the white folks none who would be truly friends of his; they would give him scraps from their table, but the very outcast of the whites would not have treated him as an equal. . . . He had two courses open to him: he could either have renounced all natural ties and led a hopeless, joyless life amongst the whites, ever a servant, ever an inferior being; or he could renounce civilization and return to the friends of his childhood and the habits of his youth. He chose the latter course, and I think that I should have done the same" (69, I, p. 103).

Curr says of the Australians as pupils of civilization, "Though these blacks have been amongst us for forty years, and many of them were born and brought up on our missionary stations, I am convinced that, were they once more returned to their forests and cut off from communication with the whites, they would, in a single lifetime, become again exactly what we originally found them" (27, p. 105).

On the Andaman Islands an orphanage, or training school, was started some years ago, and more than forty children redeemed from savagery, torn, says Prof. Petrie, from a healthy and vigorous life. These were the results: "Of all the girls, two only have continued in the settlement, the other survivors having long since resumed the customs of their jungle homes." Physically they have also deteriorated, few of those who married having children, and none of those children surviving to maturity (63).

The pathetic loneliness of Jemmy Button and his comrades, the Fuegians of whom Darwin tells in his "Voyage" (ch. X), who had been subjected to some years of civilizing in England, and were then returned to their own people, is a good illustration of the uprooted condition of the victims of such violent philanthropy.

Of the children in the orphan school near Hobart Town, Bonwick writes, "When I saw the aboriginal boys and girls . . . I enquired of their teacher in what respect they differed from the children of the convicts among whom they were thrown. All of the white race were inferior in point of physique and intellect to others of their age and color, of different parentage. They were, however, superior to the dark children in faculty of learning arithmetic and grammar, though not so in geography, history, and writing" (quoted, 67, p. 25). But while apt pupils, the dark children never took kindly to civilization, and almost invariably relapsed into their wild ways when given their liberty. In Flinders Island, where the last remnants perished in exile, they left off their dancing and hunting, and acquired the English language and useful arts, as well as an historical knowledge, at least, of Christianity. But they always preferred roaming about wild and unclothed, and even the children captured in infancy would return to their parents when grown up.

For the woful tale of the backsliding of Aniaba, the West African prince, we may consult Père Labat's "*Nouveaux Voyages aux Iles d'Amerique.* Such a case of reversion, so sudden and complete, has seldom been known. H. J. Bell (3, p. 49) tells us that runaway slaves in the West Indies habitually made for St. Vincent, an island not then colonized, and there, though they had seen so much of civilization, they returned with glee to their old life of freedom in the woods.

Some attempt has been made to refer this pubertal arrest to an anatomical cause. It has been claimed that the cranial sutures close earlier in the so-called lower races, thus preventing continued development. Keane (Ethnology, p. 44)

quotes Filippo Manetta as emphasizing this contention. Of this matter, however, a more recent authority says we have no definite knowledge as to when closing of sutures should take place. "It may sound almost incredible to the lay reader if it is stated that we do not know the average age at which sutures close, or that we do not even know with any degree of accuracy the average age of such a common and important phenomenon as the appearance of the teeth, certainly not with such accuracy as would enable us to compare the dates at which, on the average, teeth appear and sutures close in different races" (5, p. 44).

But even if this were a proved phenomenon of growth, it would by no means fully explain the psychic retardation. In fact, this can scarcely be held to be a racial peculiarity; for, as Havelock Ellis points out (31, p, 200), pre-pubertal precocity is, in individuals of all races, Caucasian as well as African, very liable to be followed by arrest and decline in after life, for precocity is simply premature hastening through the stages of development that are natural to the individual in relation to his environment and his inheritance. "Educators," says F. C. Spencer, "are beginning to realize that too much stress laid on any one stage of development is apt to cause arrest at that stage" (73, p. 90.). And that tremendous stress is laid, among all primitive peoples, on the pubertal stage, the elaborate pubic ceremonies and initiations amply show. But this matter of arrest and relapse in relation to the indigenous and the foreign pedagogy will be discussed more fully in the concluding section.

X. Our Indian Problem

The foregoing inquiry has had to do with conditions and results of modern education in environments, especially, where the representatives of the more advanced culture are, and are likely to remain, a small minority, or where, at best, there is no probability of assimilation of the lower into the higher. We shall now turn to a situation where the question of the absorption and assimilation of the aboriginal remnants is a live one. And this question confronts us most urgently in regard to our own Indians. The following section, then, will review some features of the life of our aborigines and inquire along what lines the tribal characteristics may be further developed to the end that the Indian may become a part of our civilization in the maturity of his powers and not be perpetually a minor and a ward.

The pioneers of modern civilization in North America found the aborigines in widely different grades of culture, from the savagery of the Californian and the north-western tribes, to

the elaborate systems of the village Indians of the South-west, Mexico, and Central America. Between these extremes were such peoples and tribes as the Iroquois, Creeks, Cherokees and Choctaws, who had reached a stage of early barbarism. The old cultural classification of our Indian tribes according to alleged stages of advancement is no longer held, and, while material is being prepared for an ethnographical arrangement according to customs, the best authorities prefer, as most serviceable, a grouping on a linguistic basis. Hence, in the following treatment, the consideration of the indigenous culture of certain groups is not to be taken as representing sharp cultural distinctions, but only as a convenient way of describing native attainments in different regions and under different conditions.

The *Pueblos* were first visited by Coronado in 1540. Castañeda, the historian of this expedition, reports that the houses were three or four stories high, the people intelligent and well-clad, monogamous, and not given to the usual vices of savagery. "There is," he says, "no drunkenness among them, nor sodomy, nor sacrifices; neither do they eat human flesh, nor steal, but are usually at work" (73, ch. 1). Provision for the future was carefully made, as in the storing up of fuel, and the villages were kept clean of all refuse. The government was administered by a council of Elders, for at this period the priestly and shamanistic duties had apparently not yet become identified with political power. The priests, says the narrative, announced at sunrise each day, from the highest roof of the village, the duties of right living, and prescribed certain commandments. The villages were built by communal labor, the women mixing the mortar and building the walls, and the men bringing the wood (*loc. cit.*). Extensive ruins of these villages are found to-day in Arizona.

Brinton (9, p. 116) emphasizes the fact that the Pueblo dwellers were made up of many stocks, so that their communal system must have been developed on the spot as the result of local conditions, and could not have been due to the particular genius of any one people. Their knowledge of metals was very limited. "Pottery of fine temper and in symmetrical forms was manufactured by the women. . . . Mats and clothing were woven of the fibres of bark and of grass, and the culture of cotton was at one time common, especially among the Moquis and Pimas. The arts of weaving feathers and working shells into decorative objects are not yet lost" (9, p. 117). Among all these south-western tribes, architecture was away beyond anything in the northern stocks, but purely, like their great irrigation works, a product of local necessity. Settling into a sedentary life, under conditions which required such housing and such co-operative effort, these various elements showed themselves capable, to a certain degree, of responding to the demands of their environment.

In the Pima remains, also, Brinton holds that there is no evidence of other than indigenous development. The Pimas were evidently at one time a dense population, sedentary and agricultural, with numerous towns and extensive irrigation trenches, watering a closely cultivated area of half a million acres. It is estimated, says Brinton, that two hundred thousand people may have found support in this region (9, p. 124).

Other sub-tribes farther toward the Mexican border, as the Tehuecos,

Zuaques, Mayos, and Yaquis, are described as "tall, vigorous men, active and laborious, trading in salt and woolen stuffs, and much given to music" (9, p. 125). Still farther south were the Tepehuanas, "a people of unusual intelligence, of excellent memory, and living in solid houses of logs or of stone and clay, or as genuine troglodytes in artificial caves, and cultivating abundant crops of maize and cotton, which latter they wove and dyed with much skill." Torquemada's chronicle speaks of them as the most valiant of all the tribes of New Spain, but laborious and devoted to their fields (9, p. 126).

What is known of the *Aztec* and the *Maya* civilizations, with their elaborate social and religious systems, their architecture, their calendar, and their hieroglyphics, betokens a very high development along certain lines. Authorities differ as to whether these attainments are wholly indigenous; Tylor inclines to the view that there are traces of Asiatic influence (see art. on 'Mexico,' in Encyc. Brit.): others, like Brinton, hold that the growth was wholly an indigenous one (9, p. 43). However that may be, at the time of the discovery, America had advanced well beyond the stone age, and though metal tools were few, the exactness with which buildings and towns were constructed, and the skill in various arts, among peoples with very varying cephalic indexes, point to the impossibility of a classification of American tribes on the basis of psychic capacity. Environment is the great determining factor.

The same general type of religious expression prevails, with its culture hero and creation myths, the rich symbolism of Shamanism and secret societies, and the increasing power of priests and shamans, a power not greater, however, says Brinton, than that of the Christian priesthood in many European countries. From birth to the grave, the life of a Pueblo dweller was a series of initiations, adorations, and propitiations, in which the religious spirit behind the grotesque and gruesome form gave the rites a lofty significance that our civilization has been unable to grasp, entering, as it did, like Pompey of old, into the holy of holies and finding it empty. The training of the children was a strict apprenticeship, but so natural and gentle the process, that nature and inheritance seemed the only factors at work. Moral principles were stamped in with dramatic vividness by myth and story, and respect for elders was given a primary place.

F. C. Spencer (73, p. 88 *et seq.*) speaks of the stagnation in culture among the Pueblos at the present day as due to the slavish imitation of tradition and the lack of inventiveness. This is a remark of general application wherever primitive peoples are concerned. Spencer has merely described in detail one instance of arrest in racial development. But thus far had these Indians advanced by virtue of their own indigenous motives; and all that may have been needed was the reviving touch of some true reformer, who, near to the heart of the people by long years of fellowship, would devote unto their deliverance all the impetus drawn from a higher culture.

The Spaniards were the first to attempt such deliverance (73, ch. 1). In 1580, forty years after the fruitless expedition of Coronado, three Franciscan friars sought the Rio Grande with the gospel. One went back, the other two were executed for interfering with the Pueblo rites. A later party was received with kindness, and in time some doctrines of Christian-

ity were insinuated into the native religion, and received as a new kind of "medicine." This thin edge of the wedge was driven in deeper, and ultimately the tyranny of the priests led to successive risings of the Pueblos and bloody overthrow of the innovators. Driven to bay at last, the victims of the church militant huddled together in their terraces, and wrapped still closer round them the mantle of their superstition and prejudice. Except for a few Rio Grande villages, where the communal life has been somewhat broken up,

"For the most part," says Spencer, "the elements in the civilization of these villages which so impressed the early Spanish conquistadores, are still present. The markedly superior clothing and ceramics, the exceptional industry, frugality, and cleanliness, the strict monogamy and strange marriage customs, the governing assembly of old men, and the announcement of rulings and orders by the herald from the housetop, together with their underground temples, their religious priesthood, and their strange rites and ceremonies, distinguish them, now as then, from their Indian neighbors" (73, p. 27).

The Cherokees. When the colonists first collided with this nation, it occupied all the slopes of the Appalachians and an extent of territory from the Virginias and the Carolinas to the Mississippi, a magnificent expanse of mountain and forest, valley and stream, through which they hunted and pursued their fierce foes, the Shawnee and the Iroquois. The life of the Cherokee was a pursuit of glory in the chase and in war; an existence of boundless freedom, with not a care beyond the wants so readily supplied in nature. He was as brave and enduring in war as stealthy and treacherous, but "his confidence once secured, the unselfishness of his friendship, and his scrupulous honor in payment of just debts, as a rule would put to shame that of his more civilized Anglo-Saxon brother" (68, p. 372).

It was not long before he became sufficiently acquainted with the gradually approaching fringe of civilization to learn the doubtful benefits of its trade. Liquor played its usual part, but no lasting advance in culture was made. Nearer and nearer the "new American" drew, until, at last the Cherokee realized, when too late, the danger pressing upon him. And now began the death-struggle, against rifle and against treaty, for the homes of his fathers. Between 1721, in the colonial period, and 1868, forty-seven treaties, involving transfers of over 126,000 square miles of land, were negotiated with the Cherokees by the colonial and Federal governments, the treaty of 1835 removing them entirely to the west of the Mississippi. The successive encroachment of the States, and the persistent intrusion of white adventurers, served, naturally, to bring out the ugliest qualities of the Indian; but nevertheless, from 1791, the date of the second Federal treaty with them, by which provision was made for the supply of farming implements, "the progress of the Cherokees in civilization and enlightenment was rapid and continuous" (68, p. 373). So much so, that some thirty years later they were declared fully able to do without government aid. In 1827, a constitution was adopted, establishing

legislative, executive, and judicial departments of government, and this government was duly administered until 1830, when Georgia crushed this little state within a state by threatening to formally appropriate all the land "permissively held" by the Cherokees, if this presumptuous constitution were allowed to stand. Though forbidden to hold any more elections, they continued a semblance of their republican government until their removal to the west, when the constitution was fully re-established and enforced. The report goes on to say that this removal put the Cherokee civilization back by at least twenty-five years, sacrificing as it did, upwards of a tenth of the population and so demoralizing property rights as to discourage the zeal and industry of the people in further accumulation. Yet even five years after the removal, the population was found to be again on the increase; the people living in good cabins, with greatly improved farms, and learning to provide for the future; eleven common schools existed, superintended by a native, attended by some five hundred pupils, and supported wholly by tribal funds; thousands could speak and write English fairly well, some had good libraries and showed good taste in literature, while in ordinary life the rank and file were shrewd and intelligent and showed a general desire for improvement. Then came the devastating blasts of the Civil War, reducing the population from 21,000 to 14,000, and turning their well-cultivated farms into a smoking waste. Again the spirit of this remarkable nation was tried and proved, and to-day, according to the Commissioner's Report for 1905, the total number of citizens of Cherokee blood enrolled up to July 1st of that year, was 31,275, including Shawnees and non-registered Delawares (p. 600).

The Iroquois. The Iroquois Indian council, according to Hale (34, Introd.), was the most independent and free-spoken of gatherings. The famous league of these tribes, formed about the middle, it is believed, of the fifteenth century, exceeded all former, or, in fact, all other known Indian confederacies in aiming to be a federation with a system of tribal autonomy that expressed a very lofty spirit of government. And the persistence with which the Onondaga hero strove to overcome difficulties shows other traits than those usually ascribed to a savage tribe, for, after the completion of the federation of the Five Nations, embassies were sent to the Cherokees and to the Ojibways and other Algonquian tribes, inviting them to join this peace league. The Cherokees, hereditary foes of the Iroquois, though of the same linguistic stock, refused; but with the Ojibways an alliance was formed that was only broken by French influence two hundred years later.

"Hiawatha's conceptions," says Hale (34, p. 32), "were beyond his time and beyond ours, but their effect, within a limited sphere, was very great. For more than three centuries the bond which he devised held together the Iroquois nations in perfect amity." Moreover, it was extended to include many distant tribes, and the Iroquois territory became, in fact, a "Great Asylum" of Indian tribes.

But not only was a league formed, with a purpose as wide-embracing as that of the most ardent and sincere of the signatories of the Hague Conference to-day, but the readiness of the people to accept and utilize an agency of civilization when offered not for destruction, but for

preservation, is seen in the compilation, at the instance of the chiefs of the Great Council, of the 'Book of Rites,' an Iroquois Veda, comprising the accounts of the ceremonies of installation and condolence, the functions of the Great Council. The English missionaries had reduced to writing the Mohawk dialect, and not long afterward the chiefs conceived that the innovation would be a good device for preserving their most sacred traditions. A Mohawk chief is said to have accomplished the work. There is also a part in the Onondaga tongue, recording the speeches of condolence addressed by the elder nations to the others on the death of a chief. Hale speaks of only two extant copies of this book, a chance discovery on his part (34, ch. 3), and to him we may refer for a detailed account of the contents. Besides the condolences and the installation, the same ceremony included also the reading of the archives of the Federation, and the hymn, or *karenna*, said to have been composed by the founders of the League, which eulogizes the dead fathers and their wisdom, opening with salutations, first, to the 'Peace,' the blessings of which the League has brought to them, then to the kindred of the dead chieftain, and finally to all the braves. The hymn then invokes the ancient laws of the fathers, and closes with an exhortation to listen to the ancient wisdom. It is a true 'national anthem,' and Hale remarks that "a comparison between it and other national hymns, whose chief characteristics are self-glorification and defiance, might afford room for instructive references" (34, p. 63).

The laws of the Iroquois League are an interesting study and well deserve to be incorporated in a history for their own special use, or for a school text-book. Zeisberger, speaking of the system of councils of the League, says that, as distinguished from the Algonquins, the Six Nations "became a political and a military power; . . . their conquests extended in every direction" (34, p. 68). One statute was that inter-tribal war should not arise from the occasion of private offence, as murder between tribes. Thus was inter-tribal strife averted, say the annals, for more than three centuries. Another law abolished the extravagant and revolting customs of burial and re-burial. Previously, in various tribes, bodies were kept unburied during a long lamentation, or were periodically exhumed for a new celebration, the whole thing being as dangerous and disgusting as it was expensive in the matter of gifts to the dead. But the Book of Rites ended this by an injunction to the following effect: An official delegation should bear to the house of the deceased some strands of mourning wampum, holding which the leader should address to the mourners, in the name of the whole people, words of comfort, after which "they shall be comforted and shall go on with their usual duties" (34, p. 73).

Most of us have gathered from our school-books of colonial history such an impression of the Six Nations that the very name 'Iroquois' is a synonym for incarnate savage cruelty. But, according to the uniform testimony of those who knew them best when they were in peace at home and not inflamed by hate and fire-water, these Indians lived the most kindly and helpful of lives. Beggary and poverty were unknown, and courtesy and generosity to the stranger were as spontaneous as relief and comfort to the sick and mourning of their own people.

The Sioux. This nation was evidently in a lower grade of early barbarism. They were adepts in sign language, and

"masters," says McGee (55, p. 169), "in a vaguely understood system of dramaturgy or symbolized conduct," perhaps in an early stage of development toward occultism like that of the Orient. Their implements were of stone, wood, bone, and horn, their dwellings much inferior to those of the Mandans, but erected with the most elaborate rites; their sports were both for diversion and for religious purposes, and their music was the chant and simple melody with drum, rattle, and flute, rhythm being strongly marked.

The great ghost-dance of the Sioux was one of the chief causes, or occasions, of their worst outbreaks; but the record of treaties and promises, cutting down of supplies, and all the incidents of hasty development, are even more marked here than in the case of any other nation. Records of the Government dealings with the Sioux, with accounts of the outbreaks of '62, '76, and '90, whether described by Helen Hunt Jackson (43), or by Mooney (58), show abundant cause for complaint by these Indians as to the way in which they were being civilized. One grievance in 1890, not touching bodily wants, was that their children were taken to the east, civilized and educated, and when sent home in the garb and mind of the Anglo-Saxon, there was no provision made on the reservation for their employment to the good of themselves and their people (58, p. 837).

The Mission Indians. These tribes showed less power of resistance to government methods of civilization than did the more warlike people of the north and east. This was probably, in part, due to their previous state of tutelage under the Franciscans.

The mission system of the friars was strictly paternal but had many excellent features. Municipal self-government and native supervision of labor were steadily furthered. The Franciscans insisted on a settled mode of life, and gathered the natives round their mission where they were given work and trained in cattle-raising, gardening, irrigating, and various handicrafts, as saddlery and shoe-making, forging, spinning, weaving, etc., and gradually christianized, at least nominally. The natives were very fond of games and music, and the padres thus taught them many things in a social way. Dancing was a favorite pastime in some of the missions, and great pains were taken to teach violin and other music (4, ch. 7).

Reference may be made here to an even better example of this method, in the work of the Jesuits in Paraguay in the latter half of the 16th century. At the time of the fall of the Spanish power, there were upwards of half a million families gathered into forty-seven villages. As soon as sufficiently civilized and showing capacity for self-government, ownership in severalty was granted and the right to the products of individual labor, and an attempt was made to teach self-government by allowing the people to elect their own magistrates. They were successful and happy, says Blackmar, "until they came in contact with the selfishness and avarice of the European" (4, p. 118). These Jesuit missions were centres of civilization and education, in

which a skillful appeal was made to the habits and the imagination of the native.

The great weakness of the mission system in the southwest was that which appears in another form to-day; namely, that it treated the neophyte too much as a child, as a minor, and failed to develop economic independence. Moreover, the strict routine of the mission life was too much of a change from the free life of the wild. But in the process of secularization by the Spanish and the Mexican governments, the Mission Indians of California were almost ruined, and, according to de Mofras, in eight years, from 1834 to 1842, the population was reduced from 30,650 to 4,450, in such a characteristically governmental fashion were the measures for converting the missions into pueblos executed (4, p. 142). Only about 3,000 of the Mission Indians survive to-day.

With all its faults, "no other system," says Blackmar, "came so near accomplishing the reduction of the barbarous races to a state of civilization as that of the padres of California. . . . Certainly one thing was accomplished: under the supervision of missionaries the pioneer work of a great state was begun. Considering that there were but a handful of monks to organize and superintend the work, that they worked under so many disadvantages, and that they received but little substantial aid from the civil or military authorities, the result of their occupation of California for the period of sixty years is indeed marvellous (4, p. 151). But, as he says elsewhere, the system rested on the theory of no contact with other races.

The same author remarks that a visit to such a school as the Haskell Institute convinces one that the Government of the United States is adopting, after a century of experimenting with the Indians, the general principles of the system of the Franciscans.

The Pueblo municipalities broken up, the Mission Indians almost extinguished, the Apache, the Comanche, the Iroquois, the Sioux, the Cheyenne, branded as the deadliest of bloody savages, all the tribes of the east coast, who, without exception had extended hospitality to the explorer, aroused to steadfast enmity, it is hard to see how such approaches, bringing out, as they did, all the worst qualities of savagery and barbarism, invariably, as E. S. Brooks says, taking it by the "hot end" could have had any other effect on the aborigines than an arrest of development.

"It must be evident," says Brooks, "that the American Indian, when first known to the European, was on the high road to civilization. . . A free man of the forest and the plains, a citizen of a sylvan republic, a home-lover, with a nature capable of the highest courage and endurance, virtue and honor, with a mind restricted in its workings, but singularly childlike and imitative when brought into contact with higher intelligence" (11, p. 175), many notable instances clearly prove that, protected from promiscuous intercourse with higher races, and guided by sympathetic teaching, the Indian might have evolved a fairly high type of culture.

Present conditions and needs. The day is passing for barefaced exploitation of the Red Man. His numbers are probably slightly on the increase on the larger reservations and the authorities are awaking to a sense of the nation's responsibilities in this direction. The present commissioner of Indian affair recognizes that what is needed is not transformation but improvement. "The Indian," he says, "is a natural warrior, logician, artist, and we have room in our social system for all three" (Report, 1905, p. 12).

And yet there are still some localities where the proud brave and the last scene of his weakening struggle are but a barren, starving, remnant. The report of Carl E. .Kelsey, special agent for the California Indians, shows how the few thousand survivors of the once flourishing coast tribes, victimized in no less than eighteen broken treaties involving five and a half million acres of reservation and payment to the value of one and a half million dollars, are now cooped up in a half-starving condition on rocky slopes and desert wastes that no white man wants. More than three-fourths of the allotments in N. E. California are unfit, says the Report (45, p. 15), for human habitation. Less than 30% of the children of school age are being taught (45, p. 19), and such teachers as they have are individuals who have squeezed into the civil service as a last resort, but know practically nothing of the Indian.

For the relief of the starving Campo Indians some $7,000 was raised in a recent year from various sources, and through the efforts of the Sequoyah league an appropriation of $100,000 for the relief of the California Indians has passed Congress. But it is clear that unless the Indian can be confirmed in a home of his own, free from fear of eviction, these gifts are only pauperizing him.

The time is also passing when education of the Indian shall consist in giving him a foreign culture-stuff out of books, modified according to a superficial notion of the way he can apprehend it, a foreign folk-lore, and foreign ideals of manhood and womanhood. Yet the present system is by no means ideal. There are between 30,000 and 40,000 Indian children of school age in the United States, and in 1905 there were 25 non-reservation schools, 93 boarding, and 139 day schools, besides 6 public schools with which contracts were made. The Mission Schools number 45, besides 10 contract schools, making a total of 318 purely or partially Indian schools with an enrollment of about 30,200. The total number of employees in the school service was 2,416 whites and 602 Indians (Report, 1905).

First in the development of an improved system, came industrial training, as the expression of our conviction that a better mode of access to the latent mental powers is to be found in

the training of those organs whereby the mental powers are first expressed, than in a knowledge, as Commissioner Leupp says, of the geography of Asia and the principles of cube root. But the native inheritance was still despised, and the native hands were made to work in a way that we, not the native instinct, prescribed. Now we find a movement for encouraging the revival of the real Indian handiwork; blankets, baskets, and bead-work are finding a place on the school programme, and efforts are being made to teach the original designs in basketry and pottery.

At the Lewis and Clark Exposition one case of Indian exhibits contained wholly old-time articles, such as buckskin dresses, fire-sticks, etc. The Navajo woman's hand has not lost its cunning, though it can hardly hold the market against the "genuine Navajo blanket" of the New Jersey factories. Even the starving Mission Indians of California earned in 1904-6, through the help of the Sequoyah League, $811.50 by their basketry, the old native dyes and patterns being used instead of the imported (70). In 1903, the Mohonk Lodge, Oklahoma, sold over $5,000 worth of native goods as against $1,500 worth a few years ago. Miss Sibyl Carter has organized lace-making classes on a number of reservations, and, in 1900, under her direction, the Indian women sold over $5,000 worth of lace. Several natives are putting a practical education to good account, as Miss Angel DeCora, who teaches aboriginal art at Carlisle, Miss Arizona Swayney, a graduate of Hampton, and at present teaching there native pottery and basketry, Francis La Flesche, an Omaha who has done good work in preserving Indian music, Charles Soxon, and others. (See Lake Mohonk Conf., Zayante Indian Conf., and other reports.)

The movement in this direction is much less noticeable across the border. In British Columbia, according to Inspector Green, "very little effort is being made to preserve and develop the old Indian handicrafts." There are only two or three old women now alive who know how to make the woolen blankets such as the chiefs used to wear, and the young people are not learning. So with the basketry. Every tribe had its own peculiar stitch and did really beautiful work, but in only one or two schools is any attempt being made to revive the old basketry with native patterns and native colors. The legends, too, are hard to discover, and will soon have passed into oblivion.

The course of studies recently prepared by Miss Reel embraces, besides the three R's, and geography and history, the following subjects: agriculture, dairying, horticulture and nature study; carpentry, painting, harness-making, caning, blacksmithing, engineering; cooking, housekeeping, laundry, sewing; upholstering, shoemaking, tailoring, basketry; physiology and hygiene, and music. The course appears to be eminently practical, from our point of view, for those tribes somewhat well advanced beyond the tepee and the blanket; but the theorist would modestly ask a few questions. Is this course devised from the point of view of the present stage of culture of the Indian or from that of the white man's conception of what the Indian must become in order to be called civilized? Miss Reel, in introducing the course of study, says,

"One of the needs of the Indian school service has been a uniform course of study, in order that each school may know what to teach" (Report, 1901). Can there be a uniform provision made for the three hundred schools at present among the Indians? Some fifty-nine linguistic stocks have been recognized in North America (9, p. 57); customs differ widely; each great nation has been studied by some specialist in that field, as Cushing among the Zuñis, Matthews among the Navajos, etc. Yet the Department of the Interior meets the needs of all at once by a blanket curriculum administered by its employees, four-fifths of whom are whites, while the actual teachers are prepared by no special training in the needs of the situation they have to deal with.

Of *child-training* among the American aborigines, the accounts are somewhat meagre and unsystematic. Ethnologists have not devoted much attention to this subject in itself, and the popular opinion has been that the Indian child grew up without instruction. From the articles on child-life and education by Mooney and Mason, respectively, in the "Handbook of American Indians" (14), some of the most essential facts are brought together. Many features that are common to all primitive peoples, with local variations, have been already mentioned in other connections; among most Indian tribes there is great fondness shown for children, and the relation of parent to child, says Mooney, brings out all the highest traits of Indian character.

> The native systems aimed at manhood and citizenship. The child was the pupil of the tribe, not of the parent alone, and was spurred on by example, and by motives of pride or shame, by flattery or disparagement, but corporal punishment was rare. Among some tribes, an infant name is given to the child, to be replaced later by a name of gentile or totemistic significance. Though infanticide, especially in the case of deformed children, was not uncommon, children spared were generally treated with great affection by parents, nurse, older children and others, but ignorance of common sanitary rules still leads to great infant mortality.

Various ceremonies were observed in the life of the child, such as at the time of the first ear-boring, the first tattooing, and at the initiation into brotherhoods or priesthoods. It is said of the Powhatans of Virginia that they made the boys men at the age of about ten years, by rendering them unconscious, so that they should wake up as new creatures, forgetful of all childish things. This suggests the *Zauberwald* of West Africa. But the most interesting feature in this connection is the totem vigil, common in the eastern and central regions. This the fifteen-year-old boy endured in the solitude of the forest, preparatory to his initiatory rite, thereby to gain a vision of his future "medicine" spirit, or totem.

Children of both sexes delighted in toys, games, and pets, and among the Zuñis myth and tradition were impressed on the young through wooden dolls and figures. Thus the Indian's intense love of home and tribal tradition was fostered, as in later life the trophies of war strengthened his pride of race.

The native "courses of studies" comprised, besides the ancestral economic pursuits, training in speech and oratory, art, customs and etiquette, and tribal lore. The industries were systematically taught by parents or grandparents by means of toys and play, and as soon as able to control their movements, boys and girls began to accompany, imitate, and help their fathers and mothers. Even the Eskimos were very diligent in preparing their children to meet every emergency of life, in canoeing, sledding, hunting, etc.

So rapid and radical was the change enforced by the aggressive pedagogy of the colonist and the missionary, that, says Mason (14, pp. 415, 416), "the Indian passed at once into the iron age; the stone age, except in ceremony, was moribund. . . . New social institutions, manners, customs, and fashions, not always for the better; foreign words and jargons for new ideas and activities; new æsthetic ideas; changes in the clan and tribal life; and accessions to native belief and forms of worship borrowed from the conquerors," were some of the marks of the new régime.

Brief reference has been made to art and industry. Indian games have been studied only by the anthropologist; a rich field is offered here to framers of a normal training course for Indian teachers. As to music in the schools, many private individuals have done much to arouse an interest in the indigenous melodies, but in the course of studies no provision is made for preserving and cultivating the native songs. Patriotic songs of America are advised, with introductory remarks in school about the life and work of the author; but study of real Indian song is left to ethnologists and to 'Schools of American Art.' The Indian sang from the cradle to the grave. Music was his very atmosphere, and in joy or grief, in sport or war, in personal narrative or solemn ceremony, he poured forth his feelings, regardless of artistic effects. The use of our instruments interposes an obstacle to his comprehension analogous to that due to the use of a foreign tongue in language lessons; the means stand in the way of the end. (See 32, p. 114, *et seq.*)

The Wa-Wan Press, founded by Arthur Farwell, of Newton Centre, Mass., has harmonized a large number of Indian melodies; but, while professing to keep true to the native motif, these compositions are too elaborate to be of much service in the primitive scheme. The aim of this movement of Farwell's is avowedly the development of a school of American Art, rather than of the purely native modes of expression.

Lofty counsel to young braves and maidens forms the theme of many

of these songs; consciousness of a lost cause and a doomed race breathes pathetically through the melody of the Ghost Dance; all are didactic and hortative, and we are told that the slighest defect in modulation, rhythm, song, or motion was instantly and severely reprimanded.

The newly-organized southwestern branch of the Archæological Institute of America, of which Mr. Charles F. Lummis is the leading spirit, has undertaken the task of preserving the wealth of song indigenous to American soil. And besides the well-known work of Miss Fletcher, Prof. Fillmore, Francis La Flesche, and others, the recently published "Indian's Book" (29), compiled by Miss Natalie Curtis, aims, and ought well to serve, to stimulate race-pride, as well as our own interest in aboriginal things. This work contains voluntary contributions from Indians throughout the country, some 150 songs with words in the native tongue and in English, and legends connected with the songs, photographs of Indian contributors, and original drawings made expressly for the book. Such a work well claims a place on the school curriculum, and ought certainly to be a subject of study in all training schools for teachers, native and white, of the Indian. Until but a few years ago, the singing of native songs was forbidden not only in the schools, but on the reservations; and in the Indian schools of the Canadian west, the use of the native songs, as well as of the native speech, is practically forbidden. But on some of the reservations it is found positively essential to the good behavior and contentment of the tribe to permit at least an annual dance, divested, of course, of any revolting features.

In his report on religious work among the Indians during 1905-6, Pres. Slocum, of Colorado College, describes how the Omahas and Winnebagos, after being raised to a fair degree of civilization through the efforts of the Mission schools, were, some fifteen years ago, handed over to the care of government instruction, and to-day not a vestige of Christian culture remains. The children are in utter paganism, the medicine dance is in full swing, and religious work will have to be begun all over again. This relapse the report attributes to the innate craving of the Indian for worship and song and dance, no elements of which were offered him in the Government school (Report, Lake Mohonk Conf., 1906, p. 112).

Again, in nature and nature-study, as in myth and folk-tale, we who have grown so intensely practical do well to beware lest we cherish too hasty a contempt for the devout pantheism of these ancient children who saw God in all things, who revered all animals, whose riotous imagination, in fact, conceived long years ago, a scheme of evolution that might well serve as a basis for the higher and clearer views that we boast of. Why should our Indian schools labor so hard to wean the native

from his beautiful folk-tale, to replace it by one of ours or by some crude attempt at science on the part of a normal school graduate from the east? We know too well how "natural science" is taught in some of our own schools.

If there is need that the teacher know something of the contents of children's minds on entering school in our cities and towns of the east, there is much greater need that the teacher of the barbarian spend months in long and intensive study of the aboriginal child-mind, ere he sign himself to an elaborate course of studies to be applied with the government brush, so to speak, to the exterior of all tribes and clans alike.

A charge brought against some schools of present-day social pedagogy is that they would foster a training for a state of society which does not actually exist, a training out of harmony with the social group in which the individual finds himself. Such a criticism might well be directed against our efforts to uplift the aborigines. Are we not virtually saying to him, 'Come now, you must learn to use your minds to think our thoughts, your hands to make our wares. You don't understand it, but you must copy.' From a more strictly utilitarian point of view, "what is the special gain, either to the race or to civilization," as one of the Sequoyah League publications puts it, "in making a $20 per month dish-washer of a girl whose mother would have made her a weaver that could make double that amount in basketry," not to speak of the more intimate relation of the latter culture-material to the individual and racial genius? No society ever passed at once into the manufacturing stage, skipping the laborious and thorough course of manual industry; nor is it essential that manual exercises be imported among a people with so many excellences in this very direction. With a more intensive exploitation of these, and the introduction of a few of ours, such as might be really necessary for, and suitable to, the particular tribe and its environment, a more gradual but less superficial development would be insured, further accomplishments in the direction of the prescribed course being reserved for the secondary schools.

The policy generally followed, moreover, in recruiting for these secondary schools, involves the dangers consequent on that unfortunate rift between the old and the new referred to so frequently above. When promising youth are lured far away from their home and civilized according to prescription, the usual alternatives are an opening in the modern world of industry and commerce, with loss of national identity, or, on returning home without the opportunity of putting their training into practice, a reversion to the ways of camp and tepee. All cannot teach under our formal system, government posts are not available for all; so much greater the need of instruction

in and by the tribe, in the light of modern culture, of graduates whose work shall be, scholastic or extra-scholastic, to make the very best of all that is good in the old régime, not to wholly abandon it. The policy of Major Pratt and others, of totally breaking the connection with the home and bringing the pupil out into civilized life, will doubtless hasten the disappearance of all trace of Indian national life, but will not so certainly guarantee the healthy filling up of the gap in the individual life.

Miss Collins notes of the South Dakota tribes that they "always come to a place where they take a backward step; like children, they tire of being good and have to take a little vacation sometimes" (Report, L. Mohonk Conf., 1906, p. 38). And in letters received from Inspector Green of British Columbia, he speaks of the great liability of those who have been a year or more away from their homes to drop back into the old wigwam ways, unless they can persuade their elders to give them the leadership. Up to the third standard, he says, their progress is fairly rapid; after that the work is slow, and parents and pupils alike think that education has then gone far enough.

J. M. Oskison, in a recent article (Everybody's, June, 1907), shows some of the results of the transition from the tepee to the cabin. 26% of the babies die in the first year of life, 17% in the first five years, and in the schools tuberculosis is greatly on the increase. Thus, at Pembina, Minn., 27 out of 42 deaths in the year were from this disease; at Leach Lake, 10 out of 122 pupils were sent away tubercular; at Jocko, Mont., though carefully examined and pronounced free at opening of term, 2 out of 52 died during the term, and at Mescalero, N. M., out of 500 on the reservation there were 26 deaths, while the births during the year were 21. At Pine Ridge, S. D., of 393 families, 271 occupied one-room houses, 30 of which had but one window. Many of the windows were nailed down and never opened. And so we find a new aspect of the problem looming up, that of providing sanitaria and open-air camps to rescue the perishing sons and daughters of the lords of the open plain and the forest from the effects of civilization. We seem to take it for granted that it is necessary to move indoors in order to become civilized. "Suppose," suggests the Commissioner, "the Chinese had conquered this country three hundred years ago, driven the whites back, cooped them up on reservations, and fed them on rice." The tribal commune and the reserve alike must eventually go, and the Indian be absorbed into American citizenship; we want him, however, not as a pauper, but as a fully developed Indian, strong in pride of race and ancestral traditions, capable, as an individual, of the very best his tribal commune ever pro-

duced; not trading in the treasures of his past, or parading in his paint and feathers to amuse the tourist and the curio-hunter, but bringing to our complex civilization the wealth of his manual skill, his rich imagination, his love of game and dance and song, his passionate oratory, his deep piety and reverence, and all the qualities the might and brutality of our impact has stunted and arrested, qualities revivified, purified, and made the connecting link between the past and the present.

XI. General Principles

In the face of such criticism of civilizing enterprise, it may now be urged that our best policy toward backward races is to let them strictly alone, to give them no taste of the tree of knowledge, that they depart not from the edenic bliss of their primitive condition. But, even apart from the Christian injunction, such a course is impossible. Some influences of civilization must inevitably reach them, and it is usually the harmful ones first; it is therefore incumbent upon us to stimulate the native activities and arouse the dormant race-consciousness, and thus develop independence of thought and action. But this must be a process of development, and most essential is it that opportunity should keep pace with the newly-awakened faculties.

Reference has been made to the striking difference between the laughing-eyed child of jungle or kraal, and the product of the schools. President Hall says: "The best possible test of every human culture is whether or not it can preserve that curious and unique and divine freshness of soul that is the peculiar badge and characteristic of childhood—whether it keeps us eternally young" (36, p. 188). How do our educational efforts abroad meet this test? Let the results so often cited above testify. Fielding Hall bears witness to the ruinous effects, in Burmah, of replacing native ideals in art by foreign. Glaring imitations, with hideous want of taste, result from the attempt to apply native design and workmanship to foreign objects. "The silversmiths no longer find a full demand for bowls, for drinking-cups, and for those plain vessels they make so well and ornament so deftly. Instead, they turn out weird monstrosities of teapots, trays, and other imitations of European utensils which they cannot make and which they over-ornament" (37, p. 174).

Similarly are art and industry prostituted in other lands we have occupied, most of all, perhaps, those of our own Red Men. It is not merely a question of preserving many interesting relics, but one of keeping open an avenue through which to reach the native instinct and through which alone the native faculties can best be developed. In every environment there is

abundant material for early sense-training, and there is no need of the importation of vast masses of culture-stuff. Games must precede work, folk-tale precede history, fable precede science; and of games, folk-tale, and fable even the most primitive tribes have no lack. We are too utilitarian, because we are in too much of a hurry and have stunted our own powers of imagination. We want to put the savage into the civil service or the labor market in the guise of an Anglo-Saxon. We want to make his country self-governing, but according to our own ideas of self-government.

First and foremost, since it is folly to go out as an apostle of twentieth-century culture with fixed *a priori* notions as to the worth of our own materials and methods and the worthlessness of those of the barbarian, then, on simple pedagogical principles, anthropology should step in and equip the apostle of education with at least a general comparative knowledge of race-development and a detailed acquaintance with the people he seeks to lead. A special school should supply a knowledge of the contributions each primitive race has made to world-culture and has yet preserved unmodified; a knowledge of their art, folk-lore, traditions, superstitions, polity and jurisprudence; of their present environmental conditions, their cultural assets and liabilities, and their possible place among the nations-to-be. President Jefferson, as long ago as 1803, was wiser than many educators to-day in his policy toward primitive races. (See 14, p. 171.)

Miss Kingsley writes: "The knowledge of native laws, religion, institutions and state-form would give you the knowledge of what is good in these things, so that you might develop and encourage them; and the West African, having reached a thirteenth-century state, has institutions and laws, which, with a strengthening from the European hand, would by their operation now, stamp out the evil that exists under the native state" (48, p. 327).

An instance showing the need of more thorough study of the native custom is found in the current interpretation of the Bantu "Lobola," namely, that it is a wife-purchase. The truth is, on better authority, that the dowry cattle are held by the father or guardian of the wife as security against ill-treatment of her by her husband. We are told that as a result of this custom there is less wife-beating in Kaffir-land than in Scotland (8, p. 22).

Another frequent cause of native resistance to, or relapse from, our culture, is the working of the "*Mutterrecht*." The African of the West Coast, for example, like many Indians of North America, loves and obeys his mother above all others, and office follows descent through the female line. Now, with our so often mistaken notions about the status of primitive

woman, our methods neglect her, preach a family relationship often contrary to the native ideas, and estrange the all-influential matron from the "white man's palaver." "The longer one studies the subject," says Mason, "the more he will be convinced that savage tribes can now be elevated chiefly through their women" (54, p. 238). Emphatically is this true of the North American Indian, as even a superficial acquaintance with their life shows.

Other native institutions have to be considered. For instance, the power of the jungle doctor, the "yassi" of the West Coast of Africa, as well as of the hereditary chieftain, as an ally of law and order, may be too suddenly broken. Several writers describe the mighty influence of the "Porro" of the west-coast Mendi, a secret society for males, and of the "Bundu," for females. Much evil as there is in these Porro practices—and they may not be worse than the blackmail of Hunchakist or Mafia—to proscribe them prematurely is to leave the native unrestrained by any wholesome fear or reverence. Dorothy Cator says of the Porro that it "takes the place of our vestrymen, county councillors, sanitary inspectors, police game-keepers, and I don't know how many other authorities, who in our country are all supposed to be working for the public welfare; but in such a quiet, unobtrusive way that it is difficult to realize the power it wields" (17, p. 192). Mention has been made of the salutary function of some secret societies in Melanesia. While none would question the immorality of exploiting the weakness of a people, there is doubtless often great opportunity of getting into rapport with the medicine-man or the secret order and through them reaching the confidence of the people. A school for chiefs is a regular institution in India. Could not a school for fetich-doctors be made a wholesome means of raising these deluded creatures into instruments of order and cleanliness, instead of driving them into the bush, there to work subtler evils?

A letter recently received by the writer from John W. Robinson, a graduate of Tuskegee, who is in charge of an agricultural school in Lome, Togo, says, in part:

"The people are very superstitious, and they cling to their superstitions. And why not? It is their religion. It is a great corrective power. The native who has no respect for the native superstitions is usually vile and worthless and has no respect for law or order of any kind. . . . Take a criminal before the German courts of justice here, and he will not confess his crime, because he says the white man has no way of finding out the truth. Take the same man to a fetich confessor, and the criminal confesses forthwith because he thinks the fetich possesses the power of finding out the truth."

The capacity for leadership, moreover, shown by such chiefs as Toussaint and Souloque in Haiti, suggests possibilities of depending on the native hereditary chieftains for law and order in the tribe, under the suzerainty, not the interference, of the foreigner. The Bechuanas and the Veis are not the only tribes that have produced leaders who needed only encouragement and protection from the evils of modern traffic, to bring their people forward to the confines of an indigenous civilization.

The spirit of industrial education is everywhere abroad, and is bringing good results; but until labor conditions are adjusted in greater fairness to the native, and an outlet provided for his effort, so that he becomes a necessary member of the social structure, instead of a dangerous problem, the good results of even industrial education cannot be permanent. The investigations of the South African Native Races Committee, a few years ago, elicited from capitalists and promoters who desire cheap native labor a number of letters, of which the editors say:

"Underlying many communications on the subject is the assumption that the native is to be prepared by education only for a life of toil useful to the whites, an assumption for which there is no justification. That the native should aid in the proper development of the country, to quote a common phrase, is true, but this is often understood to mean training and treating him as if he were a mere tool. Much is said about teaching him the dignity of labor. This lesson is not for him only; it appears that no inconsiderable part of the white population, especially in the Transvaal, have hitherto failed to appreciate it. There is a proneness to dwell on the indisposition of the native to engage in hard continuous work. Such indisposition is not confined to the native" (71, p. 244).

Very often, indeed, the fact that these captains of industry are as much opposed to industrial training as to academic, in so far as it affects the youth as a cheap laborer at the mines or on the plantations, throws some light on the unselfishness of their motives and the educational value of their criticism.

One great evil is very noticeable in the colonies, and that is the "tipping" custom, a practice obnoxious everywhere, but aggravated by differences of race and color. Until the time comes when regular work meets adequate salary, and this cringing dependence gives way to fixed wages for fixed services, among all classes, the native will be in bondage to a system of graft that must indefinitely postpone the day of responsible self-government.

In view of the fact that the sense of property-rights, so strong in most barbarous races, has greatly declined since they came into touch with civilization and became mere landless hangers-on, a prominent feature in every school should be a cultivation of this sense of ownership by means of school pro-

duce, for instance, for the preservation and proper use of which the pupil should be held responsible. Miss Kingsley believed that the true negro is "a logical, practical man, with feelings that are a credit to him, and are particularly strong in the direction of property (48, p. 318). Mr. Robinson, whose letter has been referred to, also finds that the African grasps and develops the sense of property faster than anything else.

Modern educators are awaking to the value of folk-lore in our own schools, as a corrective of the increasing materialism of the present day; our dread of fable and superstition is often inconsistent, and much of the barbaric *Aberglaube* could be made propædeutic to a higher faith of the simple, trusting kind so sadly declining in our own bustling centres. The savage's ever present sense of the supernatural needs correction, not effacement; thus the Hebrews were led through the wilderness, their crude anthropomorphism gradually subliming into a clearer spiritual faith. Savage nations have their own Old Testament; why burden them with ours, except in so far as it leads up to a higher revelation? To reduce to writing, in the native vernacular, any given body of tribal tradition, eliminating the baser features, aud emphasizing the better, such as those touching the great significance of child-bearing, puberty, proper sex-relations, and marriage, would not be the least service an educator might perform for a backward race.

It must also be borne in mind, as write the South African Native Races Committee, that

> "No system of education can be satisfactory for a highly emotional people which does not minister to their feelings, and develop their rudimentary artistic sense" (71, p. 244). President Hall says of the Negro, "He has a contribution to make to our race. He is and can do what we are and cannot. He has a rare gift in the wealth of his emotional life, a strength, depth, and range of feelings that we lack. No race is more hearty. These elements of the soul are oldest and most generic, and are often lost with intellectual development. In this respect he is a more primitive and original edition of human nature than we are." (Unpub. Lectures.)

Many negro melodies that we so much enjoy are traceable to the African tribe, and many fêtes and carnival customs, only recently discontinued here, are said to be clearly survivals of the African election to the kingly office (1).

As to the language question, educators like Leitner, Junod, and others, insist that a foreign tongue, being an impossible vehicle for the imagination of a child, prevents mental development. With the native tongue, says Junod, something else will die out that cannot be replaced. Why not preserve the native nomenclature and all such associations as will tend to keep alive the national spirit and love of home? It is argued, naturally, that among the lower races any attempt to use the

native dialects would be a waste of time. It may simply be asked in reply, a waste of time in doing what? In acquainting the native with the form of civilization that has with such little waste of time exterminated races in the past? A tribe that has no speech or lingo available, nearer its heart than any foreign tongue, is surely destined to disappear; but such tribes are few. Junod says that in all of South Africa there are only three main languages, the Zulu, the Sutu, and the Thonga, and only two or three dialects in each. In each colony only two at most would have to be dealt with. The general method of this South African mission, as has been said, is to use readers containing folk-lore, kraal tales, elements of science, a little general history, and local geography. English is not used below the fourth grade, and a little vernacular is kept throughout (44).

Further, language lessons, in the form of reading and writing, are begun too early. These very exercises, as we have seen in the case of many such efforts among Africans, Papuans, and others, are so foreign to the native mind, that the means of instruction become a sort of fetich, just as in later life literary attainments are prized as culture in themselves. And the compilation of text-books for the purpose of such instruction, even if based on native material, usually involves a foreign interpretation of that material, so that the primitive mind is filled, for a time, with extraneous, ill-assimilated notions, to the obstruction of the development of the naïve concept. Instruction through media foreign to the native mind, whether in language or in industry, obstructs the development of the native faculties; but this is more emphatically true of instruction in language, for here the imagination is stunted and the hand applied to meaningless uses. For all children, the ear-and-mouth method of instruction in language is the most natural; the eye and the hand come in much later. In the case of the savage child, then, these factors have much less place in early language training. The simple fact is, our educator, zealous for the uplift of benighted races, but unversed in their history and psychology, has nothing to offer them but the staples of our own schools, and he clings to reading and writing as tenaciously as did the scholastic traditions of our own race to the classics, and often mistakes the mere reflex interest of mental activity for a wholesome intellectual hunger, or a morbid anglomania resulting from contagion for an awakening sense of the value of what the native hears called culture. It is an interesting possibility that, elaborate as our modern curricula are, the study of primitive conditions may some day show us some vital omission in our programme for child-training. We even now know that, richly as we provide for "making a living," many barbarians, according to their light, have long

surpassed us in training for life itself. Our school book pabulum should be replaced, in the primary stages, by the revival and continuance of every form of indigenous activity, mental and physical, that is found in the early years of savage life, while as yet unperverted by the adult. Here is the vantage-point. The original expression of such activities has degenerated, in adult life, into base and degrading forms; the task of the educator is to get back to the source again and provide a new channel for the course of this expression, to lead up these primitive activities to a full realization of their moral, ethical, or religious significance.

And in this connection it is to be remembered that primitive child-training, especially among our Indians, was a family and tribal concern, not a professional; hence the danger of departing too abruptly and too far from the native custom in setting up our formal class methods with a professional teacher. It tends to a separation between home and school, and to the arousing of the suspicions and prejudices of the elders of the tribe. There is reason to believe that, for the children, a wholly non-formal instruction in the home, or in groups of homes would be best; while a formal system of school classes would be safer and more effective among promising and influential adults and adolescents. Adult education, in fact, is a live question among ourselves.

Finally, the question of language leads us to speak again of that perplexing problem of securing permanent advance, of preventing that relapse, or reversion, so often referred to above. This matter needs much fuller investigation and treatment than can be devoted to it in a preliminary study such as this. For, apart from the aspects of it that are common to all child-life and training, there certainly operates, in the case of the savage, a biological or phylogenetic factor, so that even a boarding school or an outing system, insuring absolute separation from the tribal environment, is no guarantee of a permanent redemption from barbarism. Not only is there a liability, in the next generation, to reversion through intercrossing with the parent stock, as the biologist would say, but even in the same individual, thus separated, the adolescent and adult tendency toward the aboriginal can be overcome only at the cost of something both individual and racial that ought not to be lost. The savage thus redeemed is a captive; he is useless to his own people, and must live the life of a stranger and foreigner. The scattered instances of successful careers under such circumstances, whatever light they throw on the question of the intellectual capacity of the race concerned, do not touch the great question of elevating a degraded, or quickening a stagnant, condition of society. Such individual methods are,

fortunately, impracticable on a large scale. The success of such enterprises as Duncan's among the Indians at Metlakhatla (76), the progress of many African peoples, as the Veis and Basutos, the gradual approach of despotisms like Persia and China toward constitutional government, as well as the rise of Japanese power, all show that the development of a people must be from within and on their own ground, in response to a stimulus that comes from without.

There is a more wholesome way, then, of meeting the relapse problem, than that of separation; namely, that of preventing the spurious advance that occasions it. That is to say, the racial instincts must, at every stage, be given opportunity for expression. This is impossible where the media are foreign; where, for example, a foreign tongue has to be learned through formal language-lesson methods in the imaginative stage of life when the mythopoeic instincts demand free play; and, most of all, where the surging currents of emotional life find, in the early teens, no expression through song and festival, but a Gradgrind system of facts and utilities is administered as if to dry up the very source of indigenous expression. Nothing of the old Greek notion of katharsis of the feelings finds a place in such a system. No preparation is made for the pubertal crisis, and at that stage of physiological and emotional maturity, the "veneered" savage or barbarian is forced back into his primitive condition, somewhat, we might say, as one who has acquired a foreign speech is driven, in outbursts of passion, to the dialect of his fathers.

On the other hand, if the educator, forearmed with some knowledge of anthropology, sought to get at the source of the native instincts and impulses, and in this knowledge supplied carefully selected native material for every stage of development, there would be less occasion for the question one often hears from a visitor to a mission settlement as to what has become of the bright pupils that promised so well on a former visit. The elements of indigenous culture already described, laws, traditions, social usages, tabus, etc., must all be reckoned with, or they will rise up and confound the educator at a later day. If these are interpreted, expurgated, and preserved, not merely as contributions to the Royal Society or the Bureau of Ethnology, but as culture material, the enlightenment of the tribe will no longer be at the cost of naïve simplicity and physical health, but will be in their own hands. The visitor may no longer find rows of well drilled mission-school protegés whose dress and deportment satisfy his æsthetic sense, and whose progress in reading and writing excels even that of the white settlers' children; but the thorough student of the situation will be able to report signs of quickening in the stagnant

environment of the tribe. Too much must not be expected of one generation. It seems reasonable to suppose that plateaux of mental and social organization are necessary for the race as for the individual, for a life career as for a school term. In activity is the safeguard against relapse, activity along a line of native bent and with a native outlook. Let the native industries be developed and brought into the world's market, not overwhelmed with shop-made importations. Let the native's race pride be stimulated, not stifled, by a comparative story of race-development, tracing side by side the beginnings of our history and his, showing the emergence from barbarism on the part of the one, and pointing to similar possibilities on the part of the other. Thus will the indigenous capacities be shaped, not in a mould of our fashioning, but in one of indigenous material, purified and enlarged by the touch of the genius of a higher culture.

Many other phases of this wide subject present themselves, each calling for extended treatment in itself. Secondary education as based on the primary indigenous training; special training of the better classes, as sons of chiefs, the priestly class, etc., with an examination of the "filtering-down" theory in general; the native jurisprudence as a source of culture material; the merits or demerits of tribal seclusion or reservation of flourishing native races, such as the Bantus, as against well guarded commerce with other nations and supersession of the native régime; and the vast question of missionary preparation and mission methods in their pedagogical aspects; such are but a few of the topics that can here only be suggested.

XII. Résumé

No conclusions as yet reached in regard to either structure, physiology, language, art, customs, morals, or religion of backward races, justify the assumption that they are specifically inferior, or for such reason not susceptible to proper educational influences.

The almost universal result of the merely commercial contact of stronger and more advanced with weaker and backward races, as seen in trade and colonization, has been the extinction or diminution and debasement of the latter.

The educational efforts of civilized among backward peoples in the past have, in general, neglected, as worthless, the indigenous tribal culture, or possible culture material. A study of indigenous conditions in some of the best known fields of colonial and commercial enterprise reveals the following facts:

(a) In India, the old methods of individual and group teaching, under sacred tree, by roadside, or in village school, by pandet, maulvi, or faqueer, set up high moral standards and

was in close touch with the home life of the pupil. The instruction in the more elementary of these schools was meagre, and mostly by rote, but was a training for life according to the native standards, and was permeated by a strong, non-professional, personal influence.

(b) These methods have been displaced by a wholly secular government system, the goal of which is academic distinction according to western standards, or employment in the government service. The new system has not succeeded in enlisting the sympathy and co-operation of the old agencies of instruction, and a serious breach has resulted between the home and the modern school. The possibilities have not been sufficiently tested of further developing and utilizing, under the new system, and as a link between the new and the old, the native educational efforts; but the better classes have been alienated, while the less stable elements of the people have been wholly estranged from their racial tradition and have become elements of unrest and sedition.

(c) In Africa, even the lowest tribes are not without notions of child-training. The more capable Bantu races, through whom the other tribes in the South may best be influenced, have definite systems of training, strict notions of sex and marital relations, and abundant material in art, folk-lore, and industry to serve as a basis for early education. West Coast races, as the Mandingoes, Krus, Veis, Sereres, and others, separate the boys and girls at puberty, or earlier, and entrust their education to old men and old women, respectively, who are well versed in tribal lore. This training is carried on among the Veis, *e. g.*, in secluded schools and contains many elements that might be preserved and developed, chiefly such as concern the significance of puberty and adolescence. Pubic rites of initiation are of great importance.

(d) In more primitive regions, as in Australia, Melanesia, and Polynesia, however little of real educational notions are discernible, there are yet many things in the art, industry, and traditions that might be incorporated into a plan of training for the native child.

(e) Modern educational efforts in African, Malayan, Polynesian, and other primitive environments have, in general, consisted rather in the imposition of a foreign scheme of instruction than in a development of the native notions. The initiative has generally been taken by missionary enterprise, but the liberty of method thus possible is soon curtailed by the financial necessity of complying with the conditions of a grant-in-aid. These two systems, mission and government, have over-emphasized the aims, respectively, of doctrinal instruction and of citizenship, or, more commonly, mere service, under a foreign dominion.

(f) The too general results of these methods have been an awakening of unwholesome ideals, and a fostering of race-contempt, which have ultimately led to social and political unrest and helplessness, or to a reversion to barbarism.

(g) Industrial education, as the expression of a wiser conception of the needs of backward races, has of late made great progress. But, in the first place, the native industries have been too generally superseded by foreign, and, secondly, the conditions of labor and commerce have left no place in the industrial world for the native and his output, and so have prevented the best permanent results of these efforts.

A study of the primitive condition of the North American Indian and of his relations with the whites from the time of Columbus to the present day, leads to the conclusion that the advance of civilized commerce in America brought about an *arrest of development* in races which were in a stage of middle or early barbarism and which showed signs of a gradual advance to higher stages. The early educational efforts of Catholic missionaries, on the principle of non-contact with civilized commerce, found the Indian capable of rapid improvement even to the stage of self-government.

The great diversity among the aborigines of America makes it impossible to prescribe a course of studies that shall be uniformly suitable for all tribes. Plans of instruction, as well as preparation of teachers, must be made in accordance with the needs of particular tribes and situations, and after thorough study of the tribal history and endowment.

XIII. Summary of Conclusions

The foregoing is but a preliminary study, the aim of which has been to glean information from several of the most instructive fields. The treatment does not pretend to be exhaustive or intensive in the sense in which it would require to be were a scheme of instruction being drawn up for some particular race or tribe; yet an adequate survey has been made, it is believed, to justify the following suggestions:

1. Some of the results of anthropological research should find a place in our normal school curricula, especially if these schools are to be looked to for a supply of teachers for our dependencies.

2. There is need of ethno-educational centres for the equipment of educators of primitive peoples (*cf.* 39). These might constitute departments in the universities, or sub-departments under the control of the chairs of anthropology and education; or might form a branch of mission training schools. (If un-, or inter-, denominational so much the better.) Training in such schools should be made compulsory for mission educators.

3. Great use may often be made of native law, polity, customs, and superstitions, as instruments of law and order, as well as sources of culture-material.

4. No scheme of education for primitive races can succeed that neglects the woman's influence in the family and the tribe.

5. Industrial and commercial training, as such, can lead to permanent benefit only when a place is found in the world of labor and commerce for the native's independent product.

6. The cultivation of a sense of individual ownership and responsibility demands a prominent place in our educational efforts among backward races.

7. There has been too great a neglect of the æsthetic and emotional side of the primitive character. Native art, music, and legend are better means of access to the race-sympathy and better means of expression of race-feelings than foreign culture-material.

7. Wherever possible, the vernaculars should be used as the medium of instruction, English being reserved for the higher stages, as genuine need arises.

8. Literary instruction, in the narrow sense, through the medium of reading and writing, has little place in a scheme of primary education for primitive peoples. Such formal "book-learning" methods, besides being inseparably bound up with a foreign content or a foreign interpretation, involve too great a departure from the indigenous tribal and family notions of child-training. Primary instruction should be in close connection with the native home.

9. The chief causes of relapse into barbarism are to be found, first, in this abrupt departure from native notions and methods of child-training; in the failure of the educator to take account of the racial as well as of the individual factors in the awakening instincts; in his haste to see an adoption of modern customs and externals; in the weakness of the native thus trained, to resist, at puberty, the tendency to arrest of development due to the preponderance of emotions over will and reason; and in the social, industrial, and commercial conditions of modern life that exclude the civilized native from a place in civilization.

10. Finally, the educator of a backward people must be anthropologist as well as teacher, and must possess, as his highest qualification, that broad humanism which knows how to value even the crudest and most rudimentary symptoms of creative individuality.

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THE VOCABULARY OF A FOUR YEAR OLD BOY.[1]

By FLORENCE MATEER, Paoli, Pa.

The subject of the following study is the author's brother, named Diehl. He was four years and one week old the day I began my observations. He used only a few sounds at the age of two years, and he was three years old before he began to make any connected sentences in speaking. Even then it was hard to understand what he meant as he usually resorted to signs and imitative motions rather than to speaking.

He is a sturdy little chap who has never known a serious illness, and he has always been accustomed to spending much of his time out of doors. He is unselfish, merry, not afraid of anything, very loving, full of curiosity, and a lover of animals and music. He has a quick perception and a ready appreciation of beauty, especially colors. He has never been required to learn anything, but all his questions are answered as fully as possible.

In making my observations, I took a note-book and arranged all the words he used alphabetically, the different initial sounds each on a different page. For ten weeks I lived almost entirely with him, taking him everywhere I went and thus affording him a broader range of subjects and more experiences to talk upon. No effort was made, however, to induce him to learn new words.

At no time while I was recording his words, did I leave him for a day without having some one take my place. Twice it was necessary for me to leave him for a day, and then his mother carried my note-book with her, recording all words I did not have down.

I even coaxed him to sleep with me, for I knew he was apt to become very communicative after the lights were turned out. This was at least the source of a better knowledge of him, for it sometimes would be half an hour before I could get to making a record of any new words he used. Such fantastic things he told me of, "Don't you 'amember,' Wance, when I was a big papa and you was a little girl?"

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[1] This study was made under my direction, as a graduation thesis at the West Chester State Normal School. I can vouch for its accuracy and the intelligence and faithfulness with which it was carried through.—HENRY H. GODDARD, PH. D., Professor of Psychology and Education.

During this time, I managed, also, to keep him entirely ignorant of the fact that I was watching *him* and taking down what *he* said. This was done to avoid his becoming self-conscious or proud and thus either talking to make an impression, or else not talking at all. I was entirely successful in this particular, and Diehl has never known anything to contradict his statement that "Wance has lessons to wite all the time." At first my observations kept me very busy, but towards the end I only began to realize how often we use the same word. During the eighth week I heard but 67 new words, during the ninth, 59, and in the tenth week 51. The whole number of words which he used during the entire time was 1,020. This includes all words which he had used before, all newly acquired ones and all original or "coined" words.

My results tabulated were as follows:

initial sound	nouns	verbs	adj.	adv.	pron.	prep.	interj.	conj.	Total for each sound.
s	70	28	16	2					116
b	60	19	16			1	1		97
k	55	20		6					81
t	32	16	11	4	6	1		1	71
p	51	12	5	1					69
w	28	24	4	4	3	1			64
h	25	11	8	3	4		3		54
m	38	8		2	4				52
a	14	5	13	10		4	2	1	49
f	27	6	8	1		2			44
d	20	14	5	2		1			42
l	25	11	5				1		42
r	26	6	9					1	42
g	24	8	5				2		39
n	17	5	7	4					33
o	6	2	3	4	1	4	2		22
i	9	3		1	2	2		1	18
e	8	2	4	1			1		16
sh	9	4	2		1				16
ch	12	3							15
j	11	1		1					13
w	1	3	3	2		2			11
v	5			1					6
y	0		1	2					3
z	2								2
q	2								2
x	1								1
Total for parts of speech.	578	211	125	51	21	18	12	4	1020

Comparing the relative percentage of the different parts of speech with the observations by Tracy, and the proportion of the parts of speech with records from other sources and with an

estimated percentage of the frequency of words in a standard dictionary, I found that Diehl's vocabulary is very similar to other records if allowance is made for the differences in age. Diehl uses more adjectives and fewer pronouns than most children, and he is more free in his use of interjections than many children.

author-ity	age of child	nouns	verbs	adj.	adv.	pro.	interj.	conj.	prep.	Total
Diehl	4 yr.	55%	22%	14%	4%	2%	1.2%	.3%	1.5%	100%
Tracy	av. of many	60%	20%	9%	5%	2%	1.7%	.3%	2%	100%
Dictionary		60%	11%	22%	5½%	1½%				100%
						number of words.				
Diehl	4 yr.	578	211	125	51	21	18	12	4	1020
Salisbury	2¾	350	150	60	32	24	20	5	4	642
"	5½	883	321	236	40	22	20	1	5	1528
Gale g.	2½	307	165	79	38	15	14	8	3	629
" boy	2½	369	189	83	42	27	21	8	14	751
Kirkpatrick	3⅝	108	217	49	94	186	27	5	19	700
Gale	3	675	238	141	53	33	17	10	9	1176

It is interesting to note that the child has, in proportion to the size of his vocabulary, almost twice as great a percentage of "action-words" or verbs at his command, as are found in the ordinary vocabulary. Through this we can see one way in which we can best reach the child to teach him. That is through action.

A letter such as "k", which begins but few words in the child's vocabulary, should not be thought hard for him to say, or unusual. In reality "k" is third in rank if we consider the frequency of sounds, but many words pronounced with a "k" are spelled with a "c."

Following is a table of the relative frequency of initial sounds in Diehl's vocabulary, and in connection with it a comparison with observations by Tracy.

Kirkpatrick gives the order of frequency of sounds as follows: s, p, c, a, t, b, r, m, d, f, e, h, l, g, w, o, v, n, u.

One of the ways by which we largely judge a child's mental development is through his rapidity in acquiring and making a skillful use of his "mother-tongue." So I have watched Diehl's progress, made during the ten weeks, by marking every word which I was sure he learned or used then for the first time. Altogether he learned to use forty-five new words, or about 4½% of his vocabulary were newly acquired.

Almost all the words he learned were the names of objects, and still he had no seeming difficulty with any of them. He

Diehl	s	11.4%	b	9.8%	k	8%	t	7.1%	p	6.8%	w	6.1%	h	5.3%	m	5.1%	a	4.8%					
Tracy	b	11%	s	10.3%	k	9%	p	8%	h	6.1%	d	6%	m	6%	t	6%	w	5.2%					
f	4.3%	d	4.1%	r	4%	g	3.9%	n	3.3%	o	2.1%	i	1.8%	e	1.5%	sh	1.5%	ch	1.4%				
f	4%	g	3.2%	l	3.1%	r	3%	a	3%	i	2%	sh	2%	th	1.3%	e	1.2%	o	1.1%				
j	1.2%	w	1%	v	.6%	y	.3%	z	.2%	q	.2%	x	,1%										
ch	1%	j	1%	y	1%	w	.8%	v	.5%	q	.2%	x	0										

never asked to have but one word explained. I had said that the town was decorated. Diehl asked me, "What decorated is?" I told him and then watched very closely to hear him say it. It was three days before I heard him use it, and then it was without any apparent effort.

I think he usually understood and used words in a correct way. One day his father was called into requisition to aid in fixing a stovepipe, and Diehl called to his sister, "Oh, Wawa, come, see papa do a stunt," and after the task was finished he cried, "Papa did do a stunt, papa did do a stunt." Surely he must have had a clear idea of the meaning of the word to use it in such a manner.

Again he was talking to a little boy that had come in to play with him, and as Diehl had the stronger will, he usually dictated what should be done. On this occasion I heard him say, "Now, John, I want you to understand." Another somewhat difficult word that I was surprised to hear him use correctly was "beware." To the best of my knowledge the only way he ever heard it used was in a song that his uncle was practicing.

He also used a somewhat unusual word one day, when, after something his mother had said, he queried, "That would sicken you would n't it?"

As it has been said, that a child's invention rather than his imitation should be the prime trait allying him with his kin in the past, I have also designated all words invented by him, whether modifications of known roots or entirely his own fabrication.

One of the most common changes he made was that of applying general grammatical rules to exceptional cases. He often formed plurals by adding es to the regular plurals, as for instance, "boatses" or "geeses." One day he asked how much ponies cost. On being told, "a whole lot of money," he asked, "As much as a hundred centses?" He also made an original form by saying he was "aworking." In like manner he formed the comparative of far as "farer," and made a new pronoun by adding self to you (youself). He said one morning, when asked how he was, that he felt "toothachey." But one of the

most unexpected things he ever said was when his father told him to do something and he said "I *will'n't.*"

Another mistake he made was that of using a verb for a noun, saying "the bleed was coming."

Diehl has no difficulty in making up words to suit the occasion. At different times he called a lawn mower a "grass-cutter," a "cut-grass," a "cutter-grass" and a "lawn-mower."

He has difficulty with his consonants, they *will* get twisted for all he tries to avoid it. For quite a while he continually called a nightgown, a "gihtnown." In like manner as he had recently learned what it was to see people go barefooted, he would call them "barefeeted."

It was easy to see how even a child tries to associate anything new with former experiences. Diehl had been out in the garden with me and I had told him the names of several plants he wanted to know, but the one he seemed most taken with was the four-o-clock. Several days after, when we were out again, I asked him the name of that plant and he said "nine-o-clocks."

He always called pepper "black salt," associating it with salt and distinguishing it by calling it black. The only difference perceptible to him was that of color,

His name for molded jelly was "ning-nong." That was his former name for a bell and was given to the jelly because it was usually molded in the shape of a bell. He persisted in calling it by that name till now we all follow his example.

In like manner he always calls "nonpareils," "new-coffee-kinders," because one day when his mother had a box of them and he asked her what they were, she jokingly told him a new kind of coffee. He immediately caught up the suggestion and called them "new-coffee-kinders."

I recorded the exclamations Diehl used and the emotions that excited them. "Ah" usually denoted surprise and this was also shown in various degrees by "jiminy" and "gee winnigers." "Aw" expressed sorrow, "humh" generally disgust or disappointment, while "bumperary" showed glorious excitement. He also had a little song of "lal-la-lal" that he would often croon when playing contentedly. "Ow" denoted pleasant pain, usually self-inflicted, and "eee" meant pleased surprise. In all he used about thirty or 3% coined words, or transferred.

I can easily and earnestly say that my observation was one of the most fascinating things I ever did, for it was continually showing me new and unexpected phases. I can hardly tell all my observation has taught me, but the most significant facts can be easily grasped. First: The child grasps and adds to his vocabulary almost any new word and recalls it for use without

visible effort. Second : A child seems to grasp names of objects more readily than abstract words. Third : While at the same age children vary in the extent of their vocabulary, they usually, unless self-conscious, have enough words to express their ideas. This shows that their means of expression grows as their ideas increase, so it is worse than useless to try and get a child to use certain words, although they may be "cute," before he has the ideas which they aid him to express. Fourth : The child's life is largely depicted by his language. Diehl's vocabulary includes many verbs that express accurately his actions during the greater part of the day. They are such as run, walk, climb, play, shoot and do. He has an abundance of technical terms applying to engines, and he uses them correctly, for engines are his hobby. There are also many names of animals and plants with which he is acquainted. Fifth : The child I find is very easily influenced for good or bad by the language of his associates. Diehl was brought into contact with two boys and within a day he was calling from his rocking horse, "look out, he'll *buck* you." He also used "aint." One of the chief ways in which we can influence a child's diction is, therefore, to permit him to hear only choice conversation, so that whatever he uses may be "English undefiled."

In my observation I was also given several hard things to think upon. What would you say or how would you feel it when a child of four had asked you to go to the river, and you had replied that it was going to rain, he should say, "A little while ago when you was n't out here, Jesus said he was n't going to make it rain?"

Who can explain Diehl's idea when after he had said he could count up to the sky and down to the ground, and I had asked how much it was up there, he replied, "The sky is a hundred and the ground's eighty and two."

Truly I can say with Wordsworth :

> "Oh dearest, dearest boy! My heart
> For better lore would seldom yearn
> Could I but teach the hundreth part
> Of what from thee I learn."

The Vocabulary.

Italics indicate words learned during time he was being studied. Quotation marks [" "] indicate coined words.

A.	afternoon	airbrake
about	again	*airship*
about (prep.)	age	alarm clock
ache	ago	alive
afraid	*ah*	Alice
after	air	all

all (adv.)
alone
along (prep.)
along (adv.)
already
am
"amember"
an
and
Anna
another
any
anybody
anything
apart
apples
apple-sauce
are
arm
around
as
as—as
ask
at
aunt
automobile
"aw"
away
awful
"aworking"

B.

baby
back (noun)
back (verb)
backwards
bad
bake
baker
balloon
banana
bank
barber
"bare-feeted"
barn
bath
be
beans
bean
bear
Bechtel
bed
beer
beerwagon
behave
bell
belong
belt
bend
Berwyn
best
bet
better
beware
bicycle
big
bigger
Bill
billy-goat
birdie
bit
bite (noun)
bite (verb)
black
"black-salt"
"bleed" (noun)
bleed (verb)
blind (noun)
blind (adj.)
block
Bloomer
blouse
blowing
blue
bluebell
board
boat
"boatses"
bologna
bones
book
borax
born
borh
bottle
box
boy
brake
branch
brandnew
bread
break
Brennen
brick
broom
brown
Brown
Brummel
Bryn Mawr
buck
bucketful
bulldog
bump
bummy
"bumperay"
bun
bunch
bureau
buried
burn
bust
butcher
Butski
butter
butterfly
button (noun)
button (verb)
buttoner
buy
by

C.

cab
can (verb)
can (noun)
candy
can't
cantaloupe
cap
carpet
care
carry
Casey
castoria
catch
"caterpill"
caught
cedar
cellar
cent
chamber
charge
Charley
cherries
chestnuts
chewing
chewing-gum
chickens
chimney
chin
"choo-choo"
chop (noun)
chop (verb)
chow-chow
Christmas
church
city
Clayton
clean (verb)
clean-up
climb
closet
clove
clover

club
coal
coal-bucket
coal-car
coffee-grinder
"coffee-kinders"
cold (noun)
cold (adj.)
"comb-hair"
(for hair-comb)
come
comfort
coming
company
cool
coop
copy
Corinne
cork
corn
corner
couch
cough
could
could n't
count
couple
covers
cow
cracker
crate
crawls
crooked
croquet
cross
crown
crows
crust
cry
crying
cup
cupboard
cupful
curl
cut
"cut-grass"
"cutter-grass"
curves
"cwin"

D.

Dandy
dark
darn
Dave
day
decorated
deep
did n't
die
died
Diehl
different
dig
"dingus"
dinner
dirty
dish-up
do
doggy
doing
Dolan
doll
dollar
dome
done
donkey
don't
door
down (prep.)
down (adv.)
Downington
downstairs
dozen
draw
dress
drink
drive
driver
dropped
dropping
duck
dump

E.

ear
Easter
easy
eat
"eee!"
egg
eight
eighty
eighteen
either
Eleanor
eleven
else
Emma
empty (verb.)
engine
enough
Eva
everything
exercise
eye

F.

face
fall
false-face
fan
"farer"
feather
feel
fence
fell
field
find
fine
finger
finger-nail
fire
fire-cracker
fish
fishing-line
five
five-cent-piece
five-cent-store
flag
Florence
flower-pot
flowers
flyer
foot
for
forgot
fork
found
four
four-o'clocks
fourth
Frank
Friday
fried
fritters
from
front
full
funny

G.

garden
Gardner
"gee-winniger"
"gee-wisz"
"geeses"
George
get
girl
"gightnown"
"git-ap"
give
glad
glass

glory
God
going
good
good-night
got
grand
grandma
grandpa
grape
grass
grass-cutter
gravy
great
green
Green Tree
grew
grind
ground
Groff
guess
guinea
gun
Gyger

H.

had
hair
half
hammer
hammock
hand
handle
hanging
hard
Harrisburg
Harry
hat
hatchet
hall
have
he
head
headache
headlight
Heaven
heavy
heel
Helen
hello
her
here
hey!
hide
high
highest
high-school
him
his
hit
hitting
hoe
hold
hole
home
honest
honeysuckle
hook (verb.)
hop-toad
horn
horse
"horsie"
hose
hot
house
how
"humh"
hundred
hungry
hurry
hurt

I.

I
ice
ice-cooler
ice-cream
ice-man
ice-water
if
in
ink
inside
into
iron (n)
iron (v)
is
"ispy"
it
itches

J.

Jake
jelly
Jesus
jiffy
"jiminy"
Jimmy
John
Johnson
Josephine
judge
July
jump
just

K.

keep
kettle
key
kick
kid
kind
kissing-bug
kitchen
kitty
knee
knife
knit
knock
knot
know

L.

lace
lady
lady-slipper
"lalla-lal"
lamp
lard
last
laundry
lawn-mower
lay
leave
led
leg
lemon
lemonade
Leon
Leslie
letter
lick
lift
light (v)
light (n)
lighthouse
lightning-bug
like (v)
like (adj.)
linen
lip
little
live
liver
lizard
loaf
long
look
loosened
lost
lot
loud
lunch

luncheon
Lynn

M.

Maggie
mail
makes
mark
market-basket
married
Martha
Mary
matter
Matthew
matting
meat-grinder
mentholatum
merry-go-round
might
Mildred
milkman
milkwagon
"Mimmie"
Miss
Mr.
mixed
mockingbird
moon
Moran
morning-glory
mouse
mouth-organ
mulberry-bush
must

N.

nail (v)
nail (n)
nanny-goat
nap
neck
necktie
need
neither
never
new
next
nice
nicer
nickel
nigger
night
nine
"nine-o-clocks"
ninety
ninety nine
"ning-nong"
no
normal school
north pole
nose
not
nothing

O.

of
off
oh!
oil
oil-can
old
Omega
omelet
on
once
one
only
open (v)
other
ought
our
out
outside
oven
over
Overbrook
"ow"

P.

pain
paint (v)
paint-brush
paling
pants
Paoli
papa
paper
park
parlor
passed
passenger
peanut
pears
peas
"peepies"
pen
pen-knife
pencil
penny
people
pepper
peppermint
petting
petticoat
phenol
Philadelphia
phospho
piano
pick
pick-a-back
picking
picnic
picture
piece
pig
pillow
pilot
pinch
pink (n)
pink (adj.)
place
plainer
plate
play
playing
"pointy"
policeman
poison
poor
pop-corn
porch
postal card
posy
pot
potato-bug
potatoes
pounds
powder (v)
prayers
preach
present
pretty
prickly-heat
pulls
pumpkin
punch
punch-bag
punk
pussy
put

Q.

quart
quarter

R.

radish
rag
rain
rain-spout
rake
raspberries
raw
Raymond

ready
real
red
refrigerator
reindeer
rest
rice
ride
right
ring (n)
ring (v)
rinses
rinsing
ripe
river
Rob
rock (v)
rocker
rocks
roll
roller-skates
roof
room
rooster
rope
Rose
roses
rotten
round
rubbed
run
running
rusty

S.

said
salt-cellar
Samuel
sand
sandwich
Santa Claus
sassafras
saw (n)
sawing-match
say
school
schoolhouse
Schofield
scissors
scratch
screen
screw
scribbled
scrub
scrubbed
"scrunt"
Schott
second (adj.)
see
send
seven
shady
shall
shell
she
sheep
Sheridan
shiny
shirt
shoes
shoe-string
shoot
shovel
show
shun
shut
shutter
sick
sicken
side-board
sides
sister
six
sixteen
skate
"skeeter"
skin
skirt
sky
slam
sleep
sleepy
slide
slippers
smack
smell
smoke
smoke-pipe
smoke-stack
snap
snoot
snout
snowing
so
soak
soap
soft
some
somebody
somehow
something
sore
sound
soup-dish-ful
sour
spider
spigots
splinter
s(up)pose
spotty
square
stamp
standing
star
start
station
stay
staying
steam-shovel
Stella
step
stick
sticky
sting
stingy
stink
stockings
stomach
stone
stop
store
storeroom
story
story-teller
straight
strawberry
straws
street-car
string
strong
stuff
stunt
sugar
sugar-bag
suit-case
summer
sun
Sunday School
supper
sweet
sweetheart
swing (v.)
swing (n.)
swinging
switch
swim

T.

tabby
table
tablecloth
take
talking
tan

target
taste
tea
teacher
tea-party
teeth
tell
"teeny"
than
thank
that
the
their
them
then
there
these
they
thin
think
thirty-two
this
three
throat
throw
throwing
thumb
thunderstorm
tickle
tie
tight
tightened
time
tin-cup
tiny
tip
to
toe
tired
together
Tom
Tommy
to-morrow
too
took
tooth-ache
"toothachey"
tooth-ache-wax
top
touch
tower
town
track
train
tramped
tree
trout
try
tub
turkey
turtle
twin
two

U.

unbutton
under
understand
up
upsidedown
upstairs
us
used

V.

valley
vase
velvet
Vernon
very
vinegar

W.

wagon
wait
wakened up
wall
Wallace
walk (n.)
Walter
Walton
want
wash
washer
wash-line
wash-rope
was n't
watch (v.)
watch (n.)
water (n.)
water (v.)
watermelon
waterspout
waved
way
we
wear
weed
weight
well
went
West Chester
what
wheels
when
where
while
whistle
white
who
whoa!
whole
why
will
"will n't"
wind (v.)
window
windmill
window-sill
wish
with
won't
wood
work
worm
worn-out
would
would n't
wrap
wreck
wreck-train
write
wringer
wrote
wye

Y.

yellow
yes
yet
you
"youself"
youth

Z.

zest
zinc-bench

THE DEVELOPMENT OF A DRAMATIC ELEMENT IN EDUCATION

By Anne Throop Craig

As a case in point of the dramatic concept, that is, of the way a child grasps the salient features of what he sees or is told, here is the Jeanne d'Arc story as related by my little boy at the age of two and a half. I had told it to him and showed him illustrations for it, and when I asked him to tell it to me again, this is what he said:

"She was a lady that took care of lambs, and she heard some people in the air talking. They told her to put on iron clothes" (*i. e.*, armor) "and go and shoot in the wars. So she went and shooted in the wars."

Is there not the backbone of each of three acts in that small story? It is very amusing,—but it is an excellent pointer for a teacher.

I know a teacher who could keep a roomful of children happy for hours playing with nothing. They would get a house ready, prepare a whole dinner, and sit merrily down to eat it,—all out of thin air. There are a lot of games in which everything is acted imaginatively. Imagination and activity—the handmaids of the child's development—but the teacher, too, must have the one and be alert with the other. The splendid energy and fancy of the child, suppressed, turn him into the restless little nuisance, the tease that he is in homes and schoolrooms where his powers meet no proper understanding and are not employed in directions to give them their natural scope. Then the child is punished, and how often it is the elders who should be! And how happily the child's nature expands and his capacities blossom at that magic tact of the mother or teacher who *knows*,—who can feel at the bottom of her heart, the same life that perpetually bubbles from the child's.

Let us see this imaginative and active—or, dramatic—method as applied in different studies. It has been so applied sporadically. More can be done with it. It can be specialized, too.

As it is now in the schools, between hours the pupils are given occasional short rests, in which they go through calisthenic exercises. Calisthenics are better than no exercise, but are never more than artificial. They counteract faults no nor-

mally developed child would have. No normally developed and normally living child would need calisthenics. Any natural activity the child's fancy and impulse suggests is better. "Recess" gives them this freedom,—and if complete relaxation too often is disorganizing, and it prove better to adopt a method, in any additional incidental intervals, of limb stretching, still imagination is not incompatible with orderly exercise, and since it is always awake in children, how stupid to reckon without it! Let them act a little play. Let them make it up on the spur of the moment. There is no artificial gymnastic equal to acting; because it is complete, has no elements left out, but holds the mirror up to the circuit of reality, from natural impulse to performance.

To get into children's ways is a wholesome knack. No fuss is essential. Fancy goes far. Suppose you try a little play in a short recreation period. If it is more amusing to "dress up," let them improvise in a moment, out of their coats and hats and materials at hand, all they want, as they do in their playtime by themselves. Jeanne d'Arc can wear a pinafore and a Tam o' Shanter, adjusted a bit differently and plated and clamped with fancy, and be rigged to entire satisfaction. Let them act out—say some especially interesting history lesson they have had,—some story of mythology or the like, or something they have been reading in their French or German. If you by chance for some of your school hour readings have used Dr. Church's excellent and beautiful translations of the Iliad and the Odyssey, you will find it will not need much urging to have them play at being soldiers creeping from the wooden horse at night,—at being Achilles, Agamemnon and the rest. You will see whether the history lessons, the mythology and all are remembered or not. If you can manage to have them try to act the foreign language stories in the language itself, it will be a great help; but in this attempt don't be too strict; correct here and there, but remember it is to seem amusement, or the spirit of it will die. Let it go on—even faultily, but go on with interest,—and the faults will grow gradually less. Children learn, we don't realize how much, but we note one day that they have after all learned to talk wonderfully, to shift their phrases intelligently, to use idioms and synonyms and autonyms correctly, without by any means our teaching them every word.

For these language plays, for one instance, suggest that the children pretend themselves in Paris—Berlin—Rome—and attempting to speak the native tongue,—so while they learn from their blunders they may still be amused by them. Such plays would be better than all the little monotonous "rondes" that were ever invented, and which amuse only very little children.

Some teachers of foreign languages do often take perhaps two of the recitation hours a week and let their pupils improvise charades on the same principle as the plan cited in this paper. They are better than conversation for children,—who are hardly conversationalists in their own language,—and the dramatic game, for such we may call it, indeed leads to conversational ability without the self-conscious effort.

Do not think, in any of these attempts, you will be successful, if you allow it to seem a set affair—a duty—to perform the Landing of Columbus, the experiences of Jeanne d'Arc, and the rest. You would at once have your little pupils as stiff as cornstalks, the arms and the feet all at odds, and—most serious of all—the spirit for it all, gone.

Say to them rather, "Wouldn't it be fun to play going to church with guns, like the Colonists long ago, and attacked by Indians—or the Vikings sailing so long over the ocean and finding land? Which would you rather? Come—let us play in this time we have!" *Want* to do it, yourself; help them to make-believe costumes; invent anything you please; bring into the play whatever you want them to remember;—say "long ago," "very," and "very, very long ago" fordates. Use expressions of time relatively, "before" and "after" and "about the same time," and so forth, *not dates*, until children are old enough to comprehend at least somewhat the perspective of centuries,—even then, never insist upon exact dates at first. The important thing to fix as regards time is the *relativity* of periods,—and if we have taught historic facts in their succession, intelligently enough for the pupil to grasp unconsciously the natural, inevitable development of events from one phase to another of the world's growth, the relativity of periods will take care of itself in his mind, and will without much difficulty later resolve itself into those exact dates which it is found useful to remember. We are inclined in teaching to fuss and worry over details that would take care of themselves. This point I have already dwelt upon as that in which the very virtue of the dramatic play is vested: that it falls in with the child's natural concept of salient features, which details in due time elaborate. We have talked about the elemental first emotions of the human being. From first feeling,—moving,—breathing,—his first perceptions are through the agency of these powers; his perceptions through hearing and seeing are but rudimentarily awake. A child will not go aside to examine a dull colored grub when a gay butterfly flutters beyond, nor listen to quiet talking when a hand—organ is playing. Large things, bright things, active things,—these are the healthy child's natural concepts,—what it instinctively stores for a reserve fund of primarily vigorous impressions. They

give healthy balance to the child's nature, and balance and definition to his later developed analytical powers.

So then what you can teach children by engaging their activities, you will truly teach them. Perhaps you will be surprised to find how quickly the child's mind proves itself first of all dramatic in its conceptions, that is, how it naturally chooses, as I have cited, the salient features of any subject or episode, without prompting. The theory of children's large concepts must be patent to every intelligent mother. This theory follows the simple fact that conspicuous things catch the attention first, that the child, seeing those, is at first too much interested to be diverted by details, that we must trust—because we see it always proved—that comprehension of detail will come of itself later, so simple a theorem that one wonders it was so long in being applied to general education; that little children so long, to their detriment, were held to nerve-trying tasks.

If you try having a child act a thing, especially in his own words, with his own improvisation (when of course it is easy to correct materially misleading errors in the enactments), will he not take the story into his nerves and muscles? There could be no better way of making him remember it. From being a more or less dead, or at least vague and distant thing, the story or lesson he has *played* will come to enliven him, to become part of his energies, and therefore to vitalize his imagination, his memory, his powers of association. It will help him to be creative, to be enterprising. It will surely prove a wonderful game. But first and always be simple with the children, sympathetically interested, and one of them when you make your experiments. If you correct them, correct them not as an autocrat, but as one who might make mistakes as well as they. When you do absurd things in this dramatic game, laugh too, and let them laugh at you in the same way that they will undoubtedly laugh at themselves and each other. Be sure that nobility of intelligence is in itself dignity and needs no words to enforce it, nor any assumed manner of aloofness, nor anything but simplicity and sympathy. Those who have a true sympathy for their pupils, whose intelligence the pupils feel sure of, and whose unaffected manners win their confidence, need never fear intentional rudeness from them. And this principle applies to everything we do in dealing with children. Especially in dealing with æsthetics in the development of temperamental power, these are all-important principles.

I have spoken of the partial use of the "dramatic" method with other studies. We are all familiar with it. It is the "play" method, the actively illustrative method, for the inspiration to which we are indebted to Frœbel and his compeers.

It has better results than any other. But that has already gained our respectful attention. I want to show the use of specializing dramatic study by itself as a part of preparatory culture. With its further study as a professional preparation this paper will not deal.

We pass the years when the plays in the incidental "recesses" may be given over to the improvisation of history, or language stories and the like in the most childish form, as we have suggested their use,—and go on to say that now, as the boys and girls grow, some regular day, at set intervals, once a month—or fortnight—be given to the presentation of some juvenile play. Let it always have some definite point, and good construction; also, the shorter the better. One act is best, at all events sufficient when made a regular part of a school curriculum, to attain the good results sought,—and moreover will probably take all the time that could be devoted to any one study, however excellent, without encroaching on other departments of training also important, since to produce this simple play, it must have a regular period of rehearsal daily. This period, furthermore, must not be too long, too arduous, nor over-criticised. The playing will undoubtedly be awkward, but if it is not over-criticised it will keep its freshness, and its awkwardness will largely smooth itself down. Don't expect smoothness, at once, or twice, or for many times. Things work out themselves, even though it takes time. But carping and impatience for perfection in too many details at once only irritates and perplexes, and so delays the more—in this as in every study and every direction of development, perhaps more in this because of its being the peculiarly personal art.

The results of anything done moderately and regularly are better grounded and more lasting than of those done spasmodically, even though the spasmodic ones be attempted with painstaking elaboration. Besides, spasmodic and elaborate attempts in all things—and particularly in this—tire and excite, and indeed cannot be done well, since to do elaborate things well requires a long, systematic and regular preliminary training in their simple technical elements, and the slow, moderate process alone gives this. Genius is occasionally said to work by spasms; but we are to suppose that it is the privilege of a Genius to be born with extraordinarily acute instincts upon which to build his art. In the same way an actor of long experience can leave off his work for periods and return to it without loss. He has come to *possess* his elementary knowledge. It has become part of his nerves and fibres. If he keeps up certain parts of his practice he can always tell himself just what he needs and how to apply it, from long analysis and practical application of methods. For his specific efforts

when he makes them he is able to prepare himself quickly; but those without training, study or experience cannot, of course, do this. That annual school plays are occasionally performed amusingly—not ridiculously—and that the young actors are sometimes comparatively natural and easy is due usually to the lack of self-consciousness of healthy and well brought up children, or sometimes to the natural childish aptitude for acting accidentally developed from fortunate lack of repression.

Now the one point of all this is that if children give these plays annually, which are supposed to be useful as showing to parents their proficiency in some study—elocution perhaps, but usually some foreign language—the truth is, they do *not* prove any special proficiency, since it is a very secondary achievement, and no indication of knowledge of a language to have learned parrot-like the phrases of some one else. To be sure they may interest some children and incite them to learn further, and the phrases and vocabulary they learn by heart in their lines they may remember; but these advantages are small and do not balance the æsthetic harm done by forcing comparatively elaborate labors upon perfectly crude and unprepared abilities, to say nothing of the nervous injury incurred.

As the school years go on with such a beginning as I have outlined, the development of the dramatic department would not be difficult to plan and systematize. It need not, should not, usurp the time of other studies any more in the later stages than in its first. As it is now, by the unbalance of its introduction without system, it usurps and harmfully distracts or excites, or else it is entirely neglected.

Little by little as the abilities grow, the scope of the study should be broadened. The plays selected may reach nearer the classical and intellectual lines. The pupils will be full of interest and enthusiasm. Could anything carry the spirit of the classics more intimately to the students till they are deeply grasped and held? You will find, if you have done at all what I suggest, that the regular early encouragement of the natural dramatic instinct will do away with much of the need of what I have called "artificial gymnastics," with much of the need of later artificial voice training. It will do away with self-consciousness in most children because by making the instinctive interest in the things that they themselves act and read, predominate, they will forget themselves in this natural interest, and will never have learned the vanity of feeling themselves on exhibition, a vanity not primarily natural or healthful, but acquired from pernicious influences and foolish admiration of precocity.

So at last when they come to give their classic plays for intelligent audiences, in their academic years—as they are accustomed to do now, only all unprepared—what they do then

will be likely to be presented with a feeling for character as great as their years' experience of life will permit; their performance will at least be simple and free from self-consciousness, so also from much awkwardness. They will have developed a greater instinctive intelligence than you would have imagined with regard to characterization, and general artistic effect, and their performance will be pleasing and well worth seeing from many points of view; even though their youth would naturally debar them from the laurels of the actor whose entire life has been given to his art, and whose age and experience permit his deeper analysis of characters.

To be able to perform some charming and classic production with grace, with enthusiasm, with as much sympathy as a symmetrically developed young mind can have for perhaps complex characters, would mean a very well rounded education and could come only from an education in the best sense of the word; a development without warping and short-sighted repression. It would mean strengthening of all the natural abilities. Whatever of literature or history or anything else—this study should have been the vehicle for expressing, or whatever it might have made use of as material for the development of its own power of expression, would be stamped on the minds of its students in clear structural outline, with true values of detail.

The elementary structure of endeavor is built upon Impression (or perception), Impulse and Action. Elaborate each as higher development may, normally the proportions remain constant. Drama reflects this, is built upon like proportions. An art speaking through the personality, the conception of its proportions becomes a personal possession. Are not these proportions of actual energy, which drama in art reflects,—those upon which are built Logic, Number, Philosophy, Music, Science, and all the useful and fine arts?

And with all this sense of structure made a more definite personal possession through the art that must express itself by means of the very personality, and more than all others leave its stamp unslightingly on every sense and fibre, what young person shall go out to work in the world and not be the better able to weigh and balance with a true sense of proportion the relations of life and work? Should not every part of every work or art he follows the more readily fall into its place? He should have learned how to hold to outlines and how to give detail its intermediate values. It might not prove all this, but it has this tendency. For does not true art mean mastery of technique for the attainment of unhampered power to express inspiration? And the gradual transmutation of this mastery of more and more intricate subtleties of technique into the personal instincts of the race, is it not the very process of civilization itself?

THE NEEDS AND METHODS OF EDUCATING YOUNG PEOPLE IN THE HYGIENE OF SEX[1]

By G. Stanley Hall

The 1,500,000,000 people, more or less, alive on the earth to-day are but a mere handful compared with the countless generations who are to proceed from their loins in the future. All posterity slumbers now in our bodies, as we did in our ancestors. They demand of us the supreme right and blessing of being well born, and they will have only curses for us if they awaken into life handicapped by our errors. Their interests should dominate all our lives, for that is living for the children, for our duty of all duties is to transmit the sacred torch of life undimmed, and if possible a little brightened, to our children's children in *sæcula sæculorum*. This is the chief end of man and of woman. The welfare of all this cloud of witnesses is committed to our honor and virtue. The basis of the new biological ethics of to-day and of the future is that everything is right that makes for the welfare of the yet unborn and all is wrong that injures them, and to do so is the unpardonable sin—the only one nature knows. Just as the soma and all the mortal cells and organs of the body and all their activities throughout our individual lives are only to serve the deathless germ plasm, so every human institution, home, school, state, church and all the rest exist primarily in order to bring children and youth on and up to their highest possible maturity of body and soul and the value not only of all institutions, but of art, science, literature, culture and civilization itself are ultimately measured and graded by how much they contribute to this supreme end. Our religion began in the promise to and covenant with, Abraham that if he lived aright his seed should be as the stars of heaven for multitude, and the essence of Christianity was the effort to fix the highest of all human sentiments upon the loftiest of all objects and thus to bring salvation by ennobling love. Hence, both Testaments are in a sense a continued love story, the romance of humanity with God. On this view, if we say that God himself when biologi-logically interpreted is simply posterity personified, he would

[1] Address at Meeting of American Society of Sanitary and Moral Prophylaxis, New York City, Feb. 13, 1908.

again be worthy of the supreme reverence, devotion and service of those who are now prone to neglect and forget him.

Now the aberrant fallen aspect of man, wherein he differs from all animals, is rooted in the excessive development of the sex functions which is no longer limited to breeding seasons nor to the desire of the female, nor exercised for procreation only, but has become an end in itself. Man is prone to mortgage posterity by consuming in his own self-gratification energies that belong to the future, or in Herbert Spencer's phrase, to over-magnify individuation at the cost of genetic powers, for there is in all a critical point beyond which development of the ego robs the future. Our life is like a richly laden ship of which we are simply the steersmen with the sole duty of navigating our bark from the last safely on to the next generation, but over-self-indulgence is breaking into the hold and looting the cargo to the loss of the consignees, our children. Like fire, sex is a good servant but a tyrannous master, and how few are they to-day entirely unscathed either by its conflagrations or its smoldering inner calentures. Prostitution, abortion, preventives, precocity, sex diseases, divorces, defective parenthood, race suicide, inability to nurse, declining birthrate in every country in Western and Central Europe and still more so in this country for native born population—all these are only a few of the more salient outcrops of the one great fact of growing abnormality of the sex function which some anthropologists now think marks the same stage of race senescence as began the decline and fall of the great nations of old.

However this may be, men have learned very much about sex within the last two decades, so that we can now begin at least to take a broad comparative view of it from its origin up to the highest animals, including man. The studies of all its grossest perversities, repulsive as they are, have shed very precious light, while just now such studies as those of Freud, Jung, Bleuler, Riklin and others in Germany, and Janet and his group in France, have shown its profound and often all-conditioning psychic ramifications and immensely broadened the field of hysteria, essentially rejustifying its etymology, though finding its symptoms often well developed in men. We have learned, too, how sex has permeated all religions, the chief problem of which some are now boldly saying always has been and must be to regulate and explain sex in its wider relationships, and thus including not merely phallic types of worship which once covered the world, but even the religion of totemic clans by their rules of exogamy. From all these sources new data are rather suddenly at hand for a far deeper and broader knowledge of sex than ever before, and this seems now certain to rescue the subject from the sex intoxicated

mystics and from the tendency of even sane men to become dogmatic, extravagant, if not absurd upon this subject as upon no other.

The old prudery and false reticence, too, are giving way all along the line. Not only are novels, drama and often works of art entering this field more freely, whether for good or ill, but staid professors like Ehrenfels of Prague, are developing a radically new sex ethics, while Galton's eugenic schemes involve the endowment of wedlock for the fit if found to be so when examined by a medical commission. The vigorous group of young professors who support the German archive for racial and social biology are urging legislation to unsex or otherwise eliminate reproduction by the unfit but extremely fecund Jukes, Sebalds, Buddenbrucks and other degenerate families, to compel marriage of all fit by progressive fines designed to make the way of the capable bachelors hard and their selfishness opprobrious. Somer and half a dozen others backed by a society are working out tirelessly very elaborate pedigrees of royal and other families to draw therefrom lessons for practical human stirpiculture. European countries, conscious of their dwindling birthrate and the increasing rate of infant mortality during the first year, as well as of the tide of emigration to both Americas, are now intensely alive to the necessity of having more men for their armies, their industries and their colonies, and that in the competition between different countries natural supremacy will ultimately go to that country that is most fecund—hence they are farther on than we in the study of these larger problems of sex, and many startling schemes designed to produce more and better men and women are already being discussed.

In the Mannheim Conference on sex pedagogy in 1905, the proceedings of which have only just appeared in a stately volume, not one voice dissented from the proposition that sex should be taught in the later years of secondary boys' schools, and the only grave differences of opinion were as to what should be taught, how and by whom, and whether certain instruction should not begin some years earlier and as to whether and how girls should be taught. In Finland, Switzerland and Hungary such instruction has been for some years authorized by law and it has also been given in a dozen or more of the largest German cities and with best results, although the Prussian cultusminister has not formally sanctioned it. Of course parents should do it, but very few will and can, although many courses in Germany are now offered to educate them in that duty. To believe or to urge, as is often done, that children now and here come up to the age of twelve or even ten to-day innocent of all sex knowledge is simply ignorance. City life itself makes

knowledge more precocious and school associations suddenly increase it so that our censuses indicate that the vast majority of children of eight or ten already have quite a body of misinformation that is most eagerly sought, that is gross in form and deplorably misleading in content. Wherever special studies have been made they indicate, too, that nearly every boy before the end of the teens has at least experimented with himself, knows a good stock of indecent words and stories and a large percentage of them, despite the noble work of the purity agencies, have soiled their minds with literature that it is a crime to print or circulate, have dangerously false views about the dangers and gravity of disease, the need of indulgence, while many are more or less panicky about their spontaneous nocturnal experiences and a percentage variously estimated from three to twelve have written to quacks whose flaunting scare advertisements many newspapers still print; and all this while mothers and lady teachers are living on complacently in their fools' paradise confident that all is well with their callow adolescent darlings, so secret, subterranean and spun-over with the web of lies and deceits is sexual life.

Our life fortunately begins with a sexually neuter period during which no sex consciousness exists, a stage typically illustrated by the four-year-old boy's question how could one tell when children were in bathing with their clothes off which were boys and which were girls? Of course the age of primeval innocence should be prolonged by every possible means, and the only sex hygiene is cleanliness to avoid irritation, loose and not too warm clothing, wholesome food, open bowels, regularity, cool bedding, active life, and objective interests. Knowledge on this subject should be given only as interest arises, and to force it prematurely at this or any other stage is a kind of psychic rape, and makes directly for precocity, so that eager curiosity should always be assured before information is given. Self handling at this age is exceptional and needs medical care.

The second specific interest which seems usually to nearly coincide with school age, is where babies come from, when the myth of the stork, doctor, or the milkman is outgrown. This is the stage Helen Keller was in when her teacher exclaimed that she was tired of hearing of new little cows, cats, dogs, babies, and when she asked the meaning of the word born, and also of a group of school girls of eight to eleven who wrote and signed a round robin request to the teacher to tell them where men and women come from. In most cases it is enough at first to explain that the young grow in the mother's body and in due time are brought forth, and that this is true of animals as well as men.

Of course the mother should give this information simply, briefly, and as something rather mysterious and sacred, though but few mothers do so, so that the teacher must qualify for this task. All that is necessary can be told briefly, and it ought to be personal. Of course, pedagogically, it should come incidentally in the nature study course, but so important is it that of itself it is a sufficient motive to introduce the subject of rudimentary zoölogy in the middle grammar grades. The needs of the sexes, of course, differ here, and it would be advantageous to segregate them for this instruction. The ideal is a woman teacher for girls and a man for boys. This would appeal far more to girls than to boys before puberty. I cannot yet find any course or text which seems to me quite ideal, although I have collected many, and Germany has at least one, and perhaps three, that are in many respects admirable.

The paternal function excites interest much later, and how to teach it many think a pedagogic crux. If the child really did repeat the history of the race this would come far later, but with our precocious sexual éclaircissement which presents this in the very worst light and long before its time, something has to be done on the back fire or immunization principle. The fertilization of plants and flowers by insects and the wind is a familiar prelude, and this knowledge when sex begins to bourgeon in the soul will blossom out with new significance. So fertilization of lower animals, of those that lay eggs, of the relations between sperm cell and ova on up the scale can be brought in an enlightening way without too objective diagrams of human organs or processes as some advocate, for the child's mind is very alert to see and apply all needed lessons from lower forms, so close are its relations to, and sympathies with, animal life. The normal should, of course, always precede the abnormal, and animal courtship, brooding, etc., are normal. This instruction need not be prolonged or much methodized-and if rightly taught does not need to be examined on. Here too much illustration, amplification and detail hinders understanding, while sex segregation is still more desirable, though where it is not practical this should not prevent teaching the subject, even to mixed classes just before puberty.

With the dawn of adolescence, when the sexes naturally draw more or less apart in the home, games, and socially, and when in nearly all savage races boys and girls are given instruction apart, often lasting for weeks, and with very impressive ceremonial initiation into manhood (for instruction in sex and its irradiation constitutes most of the material of savage education) the chief need of girls is for hygienic instruction concerning their monthly regimen at an age when folly and ignorance are most dangerous. The needs of boys are now

several; first, to know the harmfulness of self-abuse, which is very grave, although it has been the fashion to exaggerate it. They must also be disabused of their morbid fears of being lost because of the spontaneous nocturnal experiences which quacks know so well how to prey upon. Third, they need some plain talk about the dangers of infection, both by black plague and by gonorrhea, and the enormous evils of the latter, which are only lately adequately understood. All this instruction should, to be authoritative, be given by a physician. Boys are not much impressed by goody talks about purity such as clergymen, teachers or principals, and the worst of all, ladies are likely to give, and such as are now quite the fashion in the great English schools Eaton, Harrow, Rugby, etc., where such preachments are known in school slang as "smut jaws." I believe boys of fourteen need to be told, too, of the marvellous nature of the germ plasm, the most complex and highest product of the great biologos or spirit of life, and how the sexual glands in man best take care of their own functions and are no more prone to atrophy from disuse than are the lacrimal glands. They should be informed rather fully of the dangers and also the results of infection. After every general talk there should be a very carefully devised opportunity and encouragement for personal conferences that the sexual fears, that often become perfect obsessions be removed, that more instruction be given to individuals who need it, etc. The physical trainer should weigh, measure and test heart, lungs, muscles, always incidentally observing sex, and co-operate according to need with the medical instructor, unless he can give such instruction himself. Stripping periodically before an expert is as salutary to-day as it was in ancient Sparta, and from it many most wholesome influences can be evolved. So much I think the State now owes to every fourteen-year-old boy, and if we begin with those of eighteen, as we should do without delay, such instruction would be sure to gravitate downward to the very beginning of puberty, when its benefits were seen. In Germany, a few have advocated teaching sex perversions, even Sadsm, Masochism, fetichism, pediastry, and even some pornologic details, and one text including these things has been prepared there. Curiously, in Germany, it is women teachers who advocate most unreserved teaching, but I believe all this is entirely wrong, unless, of course, individually where perverse tendencies are already indicated.

For the high school Cohen and Rohleder in Germany and various investigators in England and France think self-abuse among boys the rule and perfect chastity the rare exception, while Blaschko's careful statistics of German university students convince him that they show "a greater proportion of

sex infection than any other class in the community." In this country reliable and comprehensive statistics are wanting. Certain it is that sedentary student life with its too common exemption from hard work, mental or physical, more is the pity, sheltered as it is from the struggle for existence, predisposes to temptation. The very causes that make boys leave high school and that fill college with those who do not expect to make their living by what they learn there — football, athleticism, liberty—young barbarians at play have influence here. Collegiate instruction in this subject is surely imperative, and in this great stress should be laid upon the sense of honor, chivalry and respect to women; on the gross egotism and dishonor of seduction in ways so almost ideally set forth by the lectures to students of Professor Ziegler[1] of Strassburg and in France by Wagner. Students before college need to be told of the wide range and variation of organs, both in form, size and functional activity within the limits of normality, for physical examiners agree in reporting that many, if not most, young men pass through a stage of anxiety and sometimes of morbid fears lest they are hopelessly abnormal.

All girls before leaving the secondary schools should be told of the commonest wiles and arguments used for their betrayal and some think as to risks, dangers and degrees of permissible liberty. Girls' intuitions, however, are wiser and more reliable and they need less instruction upon most of these topics, save the last, than boys. The preponderance of opinion seems to be against either instructing girls in advance what to do if unfortunate, etc., or boys concerning the proper course if they become infected and is unanimous against information concerning precautions against either of these calamities.

To me it seems clear that all children should have some instruction in this subject suitable to their age before they satisfy the requirements of school attendance and that this should be given by qualified instructors of the same sex. Hence every normal school should train teachers in this field. The church, too, has a duty in this respect which it is happily just beginning to realize in a few places. Extension schoolhouse lectures should be offered to mothers and also to fathers, as they should in most young people's clubs and societies, Christian Endeavorers, Epworth Leagues, Young Men's Christian Association and the now very many other associations for the young, of whatever faith. Such instruction should not be prolonged or over-systematic, for the pedagogic method here needed is entirely unique. Every child ought to be in frank and confidential relation with some wise, older mentor, the parent of

[1]Theobald Ziegler: Der deutsche Student am ende des 19. Johrhunderts, 6th ed. Göschen, Leipzig, 1896.

course preferred, to whom it can and will freely turn during all the ten or more years before maturity. Of the two or three-score books designed for the young on these topics in my collection every one seems to me too large and diffuse and holds the mind too long upon the subject, while most were written by people with more zeal than knowledge and often with more knowledge than discretion.

But finally, medical knowledge, indispensable as it is, is not enough, but the prophylactic needed is vastly larger. Nature's method is to long-circuit and evolve ever more widely irradiating secondary sex qualities, plumes, wattles, antlers, organs of offense and defense, balzing and tumbling and all the varieties of love antics and the showing-off instinct that are involved in the function of sexual selection. So many, if not most, of the best qualities of the human body and mind are built upon the basis of sex, and from which evolve deportment, manners, dress, ornament, the spirit of personal loyalty and devotion, the antique idea of friendship, the sentiment of honor, and above all, the nobler and purer expressions of love, and even religion itself, so that it is plain that whatever strengthens these tends to sublimate, spiritualize and normalize sex. The ideals of body keeping, physical perfection and strength, agility, skill, beauty, the full development of shoulders, chest, arms, loins, legs, a ruddy cheek, clear eye, love of exercise, of cold water and cleanliness, of nature afield, of contest and competition involving victory and defeat, the legitimate ambition of being a splendid animal with a strong and flexible voice, defiance of wind and weather, a normal appetite and sane regular sleeping habits, hearty, free, open manners, a love of the Turner's ideal —"frisch, frei, fröhlich, fromm"—a laudable passion to excel, a love of rhythmical movements as exemplified in periods of history when dancing was most varied and vigorous and did most to cadence the soul to virtue and preform it for religion; those who know, feel, do these things are developing probably the most effective of all checks and come thus against every kind of sexual aberration. It is incalculably harder to develop these results than it is to give a few lectures on sex dangers, but it is as much more effective as it is harder. It is these things in which the sexually corrupt are crippled and here those who know too much of Venusberg cannot enter. If this is so, then every introduction of a motor element in place of the old sedentary modes of training makes for chastity.

So the intelligence of youth is normally keen, alert, curious, sprouting all over with eager spontaneous interests, grasping out for new facts, fond of trying its new found powers of reason by argumentation and dispute, ambitious for the summit like the hero of Longfellow's Excelsior, showing now amazing

spells of concentration, perseverance, though perhaps alternating with periods of distraction and unrest. So every intellectual interest is a sedative, or perhaps better, an alternative of the sensuous side of sex, while merely formal school topics, dull teaching, listless routine, zestless attention are almost of themselves temptations to passion which always presses for entrance into unoccupied minds and moments and wherever there are unused functions tends to sap them. The deeds and words of great men are never so inspiring, and teachers and courses that fail of this are co-respondents with the lusty blood of youth in the indictment of sexual errors now brought against students. Among the many reasons for the more practical and even occupational training of boys I count this moral one as one of the chief because the contact with life it brings rouses a sense of responsibility to both self and the community and makes the call of the future louder and all this has a sex value perhaps primary and at least secondary.

Again, puberty is the birthday of the feelings and emotions, and these are the older and most dominant parts of the soul that really rule all our lives and have very much to do in determining sanity and insanity. Young people need to glow, tingle and crepitate with sentiments, and the appetite for excitement and sensation is at its height in the teens and here is where the principle of vicariousness of Aristotelian catharsis comes in and give the teacher of higher sexology his chief opportunity and resource. Excitement, the young must and will have, for the feelings are now in their very life. If they cannot find it in the worthy, they are strongly predisposed to seek it in the grosser forms of pleasure. Hence, every glow of æsthetic appreciation for a great work of art, every thrill aroused by an act of sublime heroism, every pulse of religious aspiration weakens by just so much the potential energy of passion because it has found its kinetic equivalent in a higher form of expression. It is for this reason that some of our German colaborers on this theme have advocated a carefully selected course of love stories chosen so as to bring out the highest, most chivalric side of the tender passion at the age when it is most capable of idealization, and still more in that country and now lately here have seen the necessity of encouraging theatre going to plays palpitating with life, action and adventure that emotional tension may be discharged not merely harmlessly but in a way elevating in the midddle teens. Even melodrama, gushy and tawdry though it may seem to adults, has been sometimes authorized. The statistical studies lately made of children's attendance upon and love of the theatre as well as of their passion for assuming rôles of many kinds in ever so fragmentary a way have come to us pedagogues of late almost as

the revelation of a new power in human nature, the educational utilization of which when we learn how to do the most and best with it, will be comparable to the harnessing of a new power of nature into the service of man.

To conclude, I am convinced that if religion were known to be only a myth and a superstition by cultured adults, it would have to be kept and its function modified for the young because of its prophylactic value for this function, even if it had no other. Its great themes are life, death, virtue, sin, duty and responsibility, love and service of God and man. These awaken old phylogenetic echoes in the youthful soul which bring it into salutary rapport with the past of the race in which, if evolution is true, the best has survived and the worst perished. Those who have been most truly religious have most sought purity and alliance with the power that works righteousness. The chief sin of the world is in the sphere of sex, and the youthful struggle with temptation here is the only field where the hackneyed expressions of being corrupt, polluted, lost, and then rejuvenated, of being in the hands of a power stronger than human will become literally true. Especially if the theme of the religion of the future be the relation of the individual to the race and to posterity, and if the world to-day is increasingly in need of a new dispensation of sexual theory and practice, we shall have to have a national, industrial, social, political as well as religious revival, such as the world has seen but once or possibly twice since the Renaissance. If this ever comes, it can only spring from a sense of demerit intensified almost to the point of moral despair and this folk psychology shows us can only arise from a conviction of impending racial decadence and sterility. This, I believe, we cannot expect because we have already begun to glimpse the magnitude and importance of this subject from so many sides and to work against downward tendencies so that what we must look forward to is a reform and progress that will come by methods of evolution and not those of revolution.

THE UNIVERSITY IDEA[1]

By G. Stanley Hall

Despite unusual pressure, I could not refuse the invitation of President James, long my friend and once my fellow student in Germany, to whom the cause of higher education in this country owes so much in so many ways, to journey hither and add my congratulations to those of so many others upon the significant new step your university takes to-day. This is indeed already a great institution in a great State, but the best thing about both is that they contain the promise and potency of a future far greater than the past or even the present. The State universities will go down to history as the best of all the institutions which the great States of the Mississippi Basin have evolved. They are the chief factor in determining the level of all the learned and of all the practical professions and more and more, as their influence is realized, they will become the very apple of the eye of legislatures and of all intelligent citizens as institutions for which no sacrifice is too great and nothing is too good. The private endowed institutions of the East, old and new alike, are just now fully alive to the inevitable but friendly rivalry and competition now on between their type of university and your own and in the steadily declining percentage of their students that come from this region and in the fact that their supply is more and more local, they realize your advantage in low or in no tuition, in exemption from taxation, in greater plasticity to present needs and in a more practical spirit and methods.

Personally, I would fain believe that nowhere in the step you now take of beginning to build a higher story upon your already imposing academic edifice will you receive a more cordial Godspeed than from the small institution I represent, which from the first and at great sacrifice of numbers and of material advantage, has stood quite alone in the country for graduate work only.

Can there be any doubt that this is our country's chief need? The echoes of Owen Wister's last month's heart to heart talk with his alma mater, Harvard, still ring in the hearts and

[1] Address delivered at the opening of the Graduate Department of the University of Illinois, Feb. 4, 1908.

heads of us New Englanders. He urged, with what seemed to some, brutal frankness, that though the balance of trade in our favor last year was $444,000,000, our balance of trade in the world's scholarship was zero, and he was able to name but three living American professors of first rank or of international fame who could draw those advanced students from other countries who were intelligent enough to find, and wise enough to travel far, if need be, to sit at the feet of the very highest authorities. As against his meagre list which most would enlarge and probably all would change, he presented a long array of savants of world-wide fame in Europe.

We have our ample share or even more of great inventors, like Morse, Edison, Bell and others who apply the results of science to useful arts, and this is a service which is more and more appreciated, but no candid, informed man can deny that we lack our proportion of the higher type of original investigators and discoverers, although there is not a popular audience in this country which would not applaud anybody's emphatic and categorical denial of this fact, and that is perhaps the worst of it.

But without endorsing any one's specific criticism, still less any list of men of superlative merit, concerning which there are as many opinions as there are interested judges, must we not all now candidly and squarely face the hardest problem of the higher pedagogy: viz., how this country can make larger contributions to the sum of human knowledge or do more for the progress of science,—a problem so vast that it seems quite presumptuous for any individual to attempt to even state, far less, to solve it.

The mere diffusion of knowledge is so vital in a republic that it must always absorb much of the energy of most educators, and our progress in this horizontal expansion has been a matter of just national pride. In no land or language are there so many pupils in lower or higher grades as in our own. In numbers, buildings and money spent we lead the world. Our college presidents are and must be attorneys, for their institutions are always working up briefs for their clients with an eye to dollars and students in about everything they do or say and we all know the pathetic state of mind and the ultimate fate of the college or university president who cannot show an annual increase of students and endowment. Some of our great institutions are vastly overgrown. This is realized in Germany where the problem of decentralization is now under discussion. Vast classes are here taught in platoons with an intricate mechanism of tests and examinations which absorb so much professorial time and energy in coaxing or coercing the lowest quarter of each class through with a decent modicum

of knowledge. A growing number of institutions are so thronged that the individuality of the student is lost in the mass and that classmates graduate without knowing each other, while the methods of testing, marking, cramming and too often of teaching are those of the high school. In one institution, 36 of the best graduate students are drafted into the drudgery of reading examination papers and doing famulus work in the laboratories under the dignified name of fellows, with a pittance of $500 a year, most of whom, flattered at first and with the vain hope of academic advancement, drop out limp and discouraged as the insight comes only too late how much better their golden years of opportunity might have been spent. These intellectually élite and best young men, the most precious gift of nature to a nation, have too often had a pathetically hard time in the few all important years after graduation when their means were exhausted and they must perforce abandon their noble ambition or plod on under a heavy handicap of rendering assistance in ways of only the slightest educational value. One of our foremost university presidents lately boasted in his annual report that owing to the help of these men almost requisitioned into service, it cost but about one-fourth as much to instruct freshmen as seniors, whereas in Germany the leading professors seek to teach entering students instead of leaving them in the hands of starveling-waged, raw recruits. On the faculty side, I have a list of over a dozen of the ablest professors in the land whom I happen to know, all of proven capacity to do the highest work of investigation, who must earn their bread by teaching rudiments year after year to callow fledglings. Again, perhaps it is too much to expect under our system that any one man can be at the same time a good outside and a good inside president, that is, can do all the work of recruiting students, attracting gifts and selecting professors and, at the same time, of so organizing the work within that each member of the faculty and each student shall be so situated as to have both the opportunity and the incentive to do the very best and highest of which he is capable and thus prevent the waste of superior talent,—nature's best gift to man. It is so much easier to give each professor the same pay, tenure, and duties, irrespective of ability and the value of his services than to realize that the chief duty of the head of an institution is to see that superior merit and efficiency have the same recognition within as it has outside academic walls, whether shown in great teaching ability or in the power to do productive effective research.

But there is a brighter side to the picture to which I gladly turn. The last few years have shown abundant promises of better things. Let us glance at these.

The fellowship system is no longer confused with charity to poor students seeking to fit themselves to preach or teach, which rests on an entirely different principle. It is no longer "paying students to come," as I once heard it characterized by a leading president. It is simply giving select graduates, who will later become leaders, leisure, opportunity and incentive to grow, and in my experience there is nothing quite so delightful as to see these young men, freed from the anxiety of self-support and from onerous duties, grow by leaps and bounds as the best of them often do. The very little I have ever done or hope to do I owe chiefly to the close companionship and suggestive stimulus of such young men who must be served and who are the hope of the world. That I was not entirely arrested twenty years ago and left a dusty, rusty, rutty pedagogue, turning over my little barrel of knowledge annually with only a minimum of improvements, is due to them. Such relations of the senescent and the adolescent mind best realize the too-faded ideal of the antique classic friendship, as set forth in Aristotle and Cicero and exemplified by Socrates and his pupils, for youth and age most need and most help each other here. "Fifteen years ago," said an old professor of a leading university to me lately in a burst of confidence, "they gave me two fellows to make doctors of, and I found I had to do things and new things and that, too, when I was already 51 and had taught to everybody's satisfaction for over twenty years. Well, I had to go to Europe three summers and to take a Sabbatical year on half pay and work like a student again and write a pretty fair book, as I think; at any rate it did me, and I hope them, good, and perhaps prolonged my life and increased my power, but it was pretty —— hard."

When the elective system was established in colleges, one of its many good results was the new spirit of healthful competition it introduced between professors and departments in the same institution. Under the old required régime, where the student had no option, the instructor had little incentive to rivalry with his colleagues. If he taught well it was from a sense of duty or because he loved his work or, very rarely, feared he might be dropped for inefficiency. But with electives he had to make his course popular with students and effective or else see his classes dwindle. In choosing their courses students soon learned to discriminate well between indifferent instructors, and the danger of the withdrawal of their patronage was a great stimulus to the professor. All who have seen the change from the old to the new have noted this marked improvement in many instructors, for it is far harder for a dry as dust teacher, even though he have an important course, to succeed under the elective than it was under the old required

system. Now one of the chief needs to-day is that graduate students learn to exercise the same wisdom in choosing between institutions that undergraduates learn in selecting their courses and instructors in the same institution. If this could only become habitual the same healthful stimulus would result. It is in fact, however, now very hard, if not impossible, for a bachelor of arts, who wishes to go further in non-professional specialization, to make this choice wisely and well, vital as it is for him to do so. His alma mater tries to keep him whether or no. His favorite professor and perhaps his mates appeal to his sense of loyalty, a sentiment now greatly overstimulated by the athletic spirit, and these influences often destroy and render nugatory the general rule that about all bachelors should not fit for higher degrees at the institution from which they received their baccalaureate. Something is generally the matter with a bright student who has not when he receives his diploma already got most of the best out of those professors he has been most with, or else the professor has failed to impart the best that is in him. Hence a new environment among new instructors, mates, scenes is an important factor in making a new start and warming up to another heat for a higher goal, and conversely one of the best tests of a graduate department is to what extent it draws from other institutions or how far it is fed solely by those who have too little initiative to seek other fields. I am convinced that many graduates stay too long with their alma mater and grow hidebound and come to mistake marking time for real progress because they do not leave the old home and seek another.

If this be granted, the question arises — how shall they find out which is the best elsewhere, or preliminary even to that — how shall they be made to realize the immense difference between the same departments in different institutions, all of which make such a brave show and appeal so alluringly in their catalogues. Many already do sedulously compare the size of the stipends awarded to scholars and fellows, and make simultaneous applications to several institutions in the spring, and in the end accept the appointment which pays most, justifying their course by pecuniary needs. How often every May and June applicants we appoint resign because they are better paid elsewhere. We all know the various schemes devised and now in vogue to prevent this practice. For one, I cannot share the censure often meted out to these rounders, nor am I disposed to complain of the often active competitive bidding for fellows that now goes on each spring, but I do complain of institutions who bribe men thus in order to strengthen by bonuses their own weak departments, letting the strong stand on their merits, and assigning fellowships on the principle of

protecting infant or decrepit academic industries. It is the student who suffers because he has unwittingly sold his right to spend his precious year or two or three in the very most tonic atmosphere the country affords. It is notorious that the biggest stipends are not always paid in the institutions which offer most opportunity and incentive, but that on the contrary sometimes the very fact that a full corps of fellows is assured by the high fees paid them, independently of the merits of the courses given, often cause professors all unconsciously to relax their efforts to win out in this competition by excellence alone. Have institutions whose professors' time and energy are essentially absorbed in undergraduate teaching a right to attract a long list of fellows by pay and then neglect them, drawing them thereby from institutions where they could receive most of the professor's care. It is idle to complain of this which is only an inevitable result of human nature which demands not censure but cure by better methods. Merely administrative remedies for these evils that have been suggested, such as equalization of sums paid to individual appointees by the different institutions, the notification by each university to all the others of its list of applicants in advance of appointments, written pledges to accept appointment required within a brief and specified time, the collective boycott on rounders — all these seem to me entirely unjustified and undignified. We should, however, deprecate all the methods of the drummers or promoters of special institutions now too prevalent for colleges in recruiting for the graduate school. Whatever be said of travelling agents among high schools to attract freshmen by the many clever direct and indirect ways now in vogue through representatives of the athletic field, of the Young Men's Christian Association, or secret societies, or special agents; — every trace of this method should be held to be unworthy of universities which want no travelling recruiters, even in the person of the professors or president, but only plain honest announcements of just what is offered sent broadcast and to all inquirers. Again, to aid the intending graduate student in selecting his institution and his teacher, it has been suggested that each college professor should carefully qualify and announce himself as an adviser on his subject, and one eminent leader has proposed a catalogue of catalogues representing all truly graduate work, and prepared by an impartial committee which would characterize the best and most distinctive feature and opportunities in each university, department by department, professor by professor. But both these schemes seem to me hardly yet practicable and therefore negligible here. We must rather trust to the natural law that real merit will in the end make itself manifest to all who are most concerned.

The true university in this country is like the tawny lion in Milton's story of creation, still "pawing to get free" from the college soil from which it sprung. It is as distinct from the college which trains for citizenship and the work of life as the latter is from the high school, and demands, above all, perfect academic freedom in both teaching and learning. There must be superior ability and training and plenty of means, for the average cost of fitting for the doctor's degree is many fold that of preparing candidates for bachelorship. There must be more or less exemption from many rules and regulations, for the geniuses in our faculties are the most unmanageable of all creatures. Their ideas are often ultra-unconventional and their lives sometimes far from comformable to the prim proprieties prescribed for the college don who is supposed to be a pattern in all things for all students, and the community. Often their expressions on subjects remote from their own, especially as exploited by a sensational press, seem not very consistent with what prudent trustees are wont to consider the interests of the institution. They are not seen at their best walking respectfully along the public thoroughfares, but in striking out new ways, for they are the world's path finders. Like a growing vine, they must often circummutate before they find the right support. Perhaps they are restless with perpetual spring fevers, always wanting to be away on scientific excursions or expeditions or to be released from routine teaching and settling manifold troublesome precedents. They may be moody or their brains seething with new and very upsetting schemes, veritable *enfants terribles* to the president, needing a long line, perhaps special standards and indulgence which never could be made general, but which are always liable to be plead as such by others. They are very expensive and something would be the matter with them if they were not always in the direst immediate need of more money for new lines of research that the world hungers for, but which only they can see and which cannot be explained to any one else. Though none have all, all have some of these traits, but we should remember it is these men who get results, who change the currents of scientific thought and punctuate the history of culture with epochs. It is they who devise economic and industrial processes that enhance the prosperity of localities and of nations, that write the memoirs that are applauded by the consensus of the competent, the world over, that win the Nobel prizes, unearth the dinosaurs, make the gratings that analyze the spectrum, demonstrate the ultra atomic ions, freeze hydrogen, draw the latest maps of the canals on Mars, demonstrate the existence and the nature of ether, unearth antediluvian cities and decipher their history from inscriptions, create new species of plants and animals by

crossing, formulate the laws that underlie industry, trade and the evolution of plant, animal and psychic life and at the same time make us all feel that though this recent progress has been so amazing, the history of science cannot yet be written because the best things have not happened or been found out yet. Nature is still a vast storehouse of laws yet to be known and of forces yet to be utilized in the service of man and the best of us are only pygmoids compared with the superman that is to be. The investigator who is both born and made, such in whom nature and nurture have combined to do their best, who reads God's thoughts after him most truly must be largely a law to himself and needs some special dispensations. The expert who has achieved mastery in one point, small though it be, who is no longer an echo but an authority, whom no one can teach on his own theme but who can teach all the world, he, best of all men, perhaps, knows in his own experience what perfect intellectual freedom is, for his mind has at last set itself into independent action. He stands on the frontier of nature and looks upon her fate with the same freshness of curiosity with which primitive man or the child first viewed her. Moreover, we must not forget that more and more the world is ruled by experts. In the sick room, where life and death tremble in the scale; where the practicability of great engineering schemes is decided; where new problems of statecraft or financial new departures are discussed; in the crucial emergencies of war; in the congressional committee; where important legislation is wisely considered; in advising new economic processes, mechanical or chemical; municipal and government reform;—on countless special commissions everywhere more and more the decisive word is spoken by the expert who has studied all and deeply and mastered his field, who can take a broad comprehensive international view and these universities more and more must supply, for self-made men are less and less adequate to cope successfully with our increasingly complex conditions of life.

At the very heart of the German state, one of the most autocratic on earth, stands a university which is perhaps the freest spot on earth. Directly across the street from the Kaiser's palace I have heard principles opposed not only to those of monarchy and aristocracy, but of government itself openly advocated. An eminent astronomer in Leipzig not long since became a convert to the crassest type of spiritualism, but was allowed to lecture freely upon it ex cathedra. The false and even ridiculous and fantastic views that have been advocated by university professors in that country would make a long, sad chapter; but never has freedom been more completely vindicated, for the bad ideas have always and everywhere perished and good ones have sur-

vived. In most respects the German universities are freer than those of America. The professor here who attacks monopolies or who advocates radicalism in religion or meddles too intently with political problems, like free trade versus protection, often has a hard time of it. Radically, as I personally dissent from the views of the Chancellor of the University of Syracuse, I should deprecate any steps to muzzle or depose him for his utterances, and I cannot but deprecate in advance such qualifications or restrictions of academic freedom as have been advocated by the former president of this university and which have made him, of all men, the chosen spokesman upon this subject in the University of Chicago.

It is now often urged that State universities cannot and should not undertake this work, but leave it to privately endowed institutions which have thus far led in it, and that it will be long before State legislatures will see the need of building these costly higher stories upon the splendid academic foundations they have already laid. But does any intelligent citizen doubt the great practical and industrial value of the immense sums our national government has spent upon research connected with agriculture, mining, forestry, fisheries, irrigation, labor and the rest, or would any eliminate the expensive work done in astronomy or anthropology, the results of which are not materially practical? Or if things "made in Germany" impress us, we may remember that she leads the world in chemical industries with an annual profit of $103,000,000, the six leading firms there employing an aggregate of 685 university trained chemists. Is anything better demonstrated to-day than the fact that original research pays if we wish to put it on that plane just as we know from so many statistical curves how profitable higher education is, each year of training adding in a marked way to the worth of the average student who takes it whether measured by his own annual income or by the contribution he makes to the wealth of the country? There are few more impressive spectacles in the land to-day than the splendid emulation of the few leading State universities who have lately become old and strong enough to have leavened the legislatures of their State with the saving new sense that they must have each year all the appropriation they can profitably use. If this policy of lavish expenditure has proven so profitable for the nation and for Germany, why not for the individual states in aiding them to develop their own peculiar resources? Certainly regents and legislatures are not less far sighted, not less confident of the indifferent progress of science and of the country in the future than are the trustees of older endowed institutions, and just as surely there can be no dearth of talent to penetrate and harness nature's resources if only there are sufficient incentives.

To be sure, we yet lack some of these. A great professor in continental Europe has many motives and rewards not offered him here. In some places he can have a year and often three, off for the asking and sometimes with full pay. Some of the most eminent savants, like Van t'hoff, are entirely exempted from teaching, and are practically given the freedom of the city and the country. A few others, like Arthur Thompson, are given facilities to attract the very best men in the land, if not in the world, about them where they work together all day in the laboratory, discuss details of methods and results and pool their individual knowledge and suggestions into a collective fund at meals in common. Others are knighted and given various badges and insignia of honor, patronized by king or emperor, made members of the choice circle of the Forty Immortals and of national academies, elected by the suffrage of their peers, are consulted and highly paid by every legislative commission and new industrial enterprise where expert knowledge can be utilized, allowed to profit to the uttermost by the fruits of their labors and if they fail to do so are generously pensioned by the government, perhaps buried in Westminster Abbey like Lord Kelvin, given public monuments of bronze and assured the highest social position distinctly above that which millionaires, even by birth where that counts for so much, can attain. These things, as human nature is, are incentives of inestimable power and of which our republic cannot yet supply a parallel, much as we have accomplished without it.

The history of real university work in this country is brief, for it begins with the Johns Hopkins University in the sense that there first a group of experts devoted their chief or sole time to graduate work and to research with fellows free to cooperate. Perhaps specialization there was at first and in some cases somewhat premature and extreme and its young doctors soon found in most American faculties were a little too prone to lecture methods for callow students and to affect research before foundations were laid, but these tendencies tend to rectify themselves. That foundation will forever mark a noble epoch in the history of the higher pedagogy here. Then came the era of fellowships and of publications of the results of investigation in serial monographs and new journals. The three universities almost simultaneously founded—Clark, Chicago, and Leland Stanford — specially provided more or less for the most advanced work. Later followed the foundation of the Association of American Universities for the discussion of specific graduate topics and also the special societies of mathematicians, physicists, psychologists and the rest which have proven a source of great and wholesome stimulus. We must

note here the attempts to improve and to some extent reorganize the work of the national academy and of the American association, to say nothing of the recent great enlargement of the scientific work at Washington. In this list, too, belongs the Carnegie Institute for the advancement of science and also the pension institution of this great donor and many other individual bequests for special lines of medical and other research, the Princeton tutorial system, partly graduate, which, although largely undergraduate, has had a beneficent effect upon graduate work. We seem to be lately in an era of comprehensive plans for new organizations for scientific exploration galore intended to appeal to the minds of philanthropic millionaires which need only their submentions to be translated from dreamland into actuality, but which show that our best men, young and old, are seeing visions of still further advance.

In the impending progress in this line which seems now so certain, so great and so near, we may expect one modification of older academic programmes. Fifteen years ago it was quite commonly assumed that pure science ranked not only far above, but must pedagogically precede applied science. A former colleague of mine at Johns Hopkins used to say that in deciding between two problems of research, one of which promised great utilities and possible wealth to the community or to himself, while the other was void of all applications and did nothing but advance the sum of human knowledge or fill a gap in the logical scheme of science, the latter should always be preferred. But I think that now, scientific values being equal or even approximately so, the problem that promises most useful results would always be preferred, even for pedagogic reasons, because we have learned that the sense of being in touch with human needs and the prospects of general benefit and ensuing popular recognition are a wholesome, sanifying, as well as a most potent stimulus in overcoming the great difficulties with which the discoverer has to contend. But on the other hand, sad will be the day when the keenest minds are not fascinated by the pure love of new truth for its own sake and are not alert and put on their metal in its pursuit, even though it can buy or bake no bread and do nothing whatever, save to gratify the noetic passion. For it is often just these most unfruitful achievements in the field of purely theoretical studies that often afterwards open up the way to the largest utilities, while at the same time at the very least, science is inexpressibly precious because it is the simplest and most economic way of knowing the universe because it enables us to bring innumerable details under the majestic sweep of a few great laws, and thus is the most effective way of organizing the brain in a compact, strain-resisting way.

Only 102 years ago the power of Prussia was shattered by a blow, at the battle of Jena. Its army, its industry, its trade were gone. The country was impoverished and its capital garrisoned by French soldiers. Its soil had never been fertile, nor its spirit practical. There were strong nations all about it, with no defence of natural boundary and the history of the country had shown more discord than unity. The German race had never known such humiliation and the future never seemed so dark, but the stock was vigorous and with indomitable zeal the work of national regeneration began. The entire military system was reorganized on essentially its present basis. The land laws were reconstructed and the peasant freed. Patriotic societies, athletic, philosophical and literary were founded everywhere, but the key word was spoken in Fichte's thrilling addresses given every Sunday evening through the winter in Berlin with Napoleon's sentries at the door and his spies stationed through the hall. He said in substance—"We still have strong, sound bodies, a language without admixture of foreign tongues, and a pure blood. We have achieved the work of the reformation. If we fail, freedom dies with us. There is but one way of national regeneration and that is the way of education which we must make our chief task, our duty of duties. It is schools that must set the nation free and educational currents must flow downward from great universities. We must realize again in the world the republic of Plato where the wisest rule and education is the chief problem of statesmanship, and experts must bring all available knowledge to bear upon the decision of every question. We must adopt this policy as our destiny, our leaders must be our professors, priests of truth, and in her they must think fearlessly, and in all directions must investigate, discuss, do and if need be, suffer all things in the world's great holy cause of science and learning. To this end he invoked all ranks and classes, for only thus could the united fatherland, long hoped for, long delayed, become real and men of a higher type be evolved. Thus Fichte spoke and was heard as no one had spoken and been heard since Luther. For him higher education was the supreme cause of the world. It was under this impulse that the university of Berlin was founded in 1812 and along these lines the fatherland has become the most effectively governed as well as the strongest military power since ancient Rome. Just as the Reformation spread to all lands, so she has set educational fashions everywhere, and just as two generations later, in 1870, the military results of this policy surprised the world, so since her marvellous conquests in the fields of industry and trade are conquering by the methods of peace and all has been done by her educational system capped and led by the university.

Finally, who will deny that science in its widest scope including all the physical and humanistic branches is the greatest achievement of man? To contribute a tiny brick to this great edifice, men are content to spend laborious lives, to become laboratory hermits, to explore with great hardship, labor and risk and even in inhospitable lands, to deny themselves, if need be, the luxury of polite general knowledge and focus their energies upon highly specialized themes in order to know and to teach the world more of the laws of force, energy, life, health, reproduction and disease. Think of the thousands of devoted lives that have been built into the great temple of scientific truth, sometimes into a single instrument or method which Raymond thinks constitute the best guarantee that the world will never again relapse to barbarism, and think what the world to-day would be without this priceless body of organized, demonstrated truth which underlies not only the culture but the very civilization of to-day. It is of this structure that universities are the chief organs and for that reason, also, the best nurseries of talent, doing more and more to bring it to its highest maturity. It is they that set fashions of thought, find out more economic ways of knowing things and grasping truth as revealed in nature and men. It is the efficiency of their work that more and more determines in the land the quality and standards of the pulpit, of the bar, of medical practice, of technical and industrial efficiency, and they are ever entering and dominating new fields of commerce, government, education, and some of them are making their influence felt by courses designed to lift the standards of journalism, diplomacy, finance, music, drama, architecture, etc., and under this expansive policy no man can set limits to the scope or influence of the university of the future. In view of all this, what true knight of the Holy Spirit of truth can refuse to the new department you begin to-day his hearty, ungrudging and reiterated Godspeed?

PSYCHOLOGY OF CHILDHOOD AS RELATED TO READING AND THE PUBLIC LIBRARY.[1]

By G. Stanley Hall.

One of the most significant culture movements of the last few years in this country is the invasion of the library upon the school. In the *grades* the library now goes to the school and the school to the library. Librarians make the children's reading room attractive and tell stories even on fine days when some children ought to be out of doors, and offer most seductive lists of supplementary reading for every grade and topic. The library often takes sole charge here and should take charge of those beyond school age. The *high* school expects the pupils to find help in the library for debates and composition, if not for daily lessons, and librarians teach them how to get at what they want. In the *college* and the university the library is becoming more and more the heart of everything and the professor a grand chamberlain to introduce books, give their credentials and inspire students to read them. The library is the centre of the seminary and a necessity even in the laboratory. More and more of our college dons' teaching is where to find what literature may be wanted. Now, for young people, nearly half of whose body by weight is muscle, to sit in closed spaces in the usual reading postures and exercise only the muscles of the eye that weigh two ounces, monotonously zigzagging across the printed page, while nearly a quarter of fourteen-year-olds develop eye defects, presents a serious problem in racial hygiene. If the child actually becomes bookish something is usually the matter with it, but despite the dangers, the advance of the library upon the school is on the whole a vast benefit for the latter, which I would represent to-night, and I could easily consume my hour in describing actual and hoped for good results.

One danger, though, that now looms big is that of mediocrity, of the second or tenth best in literature, for the great problem of selection from the so rapidly growing mass of juvenile books written for children is by no means solved, not even in Germany, by Ziegler's Jugendschriftenwarte with its 78 com-

[1] Address at meeting of the New York Library Club, New York City, Jan. 9, 1908.

mittees in 28 German states, or by Wolgast's two books and Prüfenausschüsse that gets often a dozen expert verdicts for each book and accepts or condemns to oblivion, a muster that it is hard for a poor book to pass, and upon which the sentences pronounced are crushing. The sad fact remains that children can develop a veritable *cacoethes legendi* or a passion for reading *per se* things on or below their own level, mere ferment, artificiality and vanity, that they ought to learn in the more vital ways of experience and conversation. Printing gives no added value to commonplaces and the reading habit should not dignify platitudes. Apprehension through the printed page is slower and involves more nervous strain than perception, and the book is liable to get between the child and nature and life. Child life in the field, on the street or at home is rich and must not be encroached on. Not only may the new knack of reading or seeing familiar things through the medium of print by authors who strive to get down to the children and tickle them by quaint affectations of style and sickly sentiments become a distinctly neurotic habit, but it may make things near seem afar and unreal and bring mental anæmia. The charm to a country child of reading in the first grade literature of the cow, pig, dog, cat, which he knows so well at first hand, is almost meretricious, and the same is true for the city child and also up the grades. Nor is it well to spend much time in reading about what every child is dertain to learn anyway at first hand a little later. Thus the precept to read only what adds something essential, that could not be got otherwise and outside the stern and narrow time and place limitations of the child's individual life, would reduce many of the lists, and neither in the school nor the home can or should the book compete with the oral story. So, too, illustrations should be many of them colored. Most of them full of action with broad and simple treatment, perhaps drawable; not too often making really pitiable misfortunes humorous or jocose, and thus blunting pity or suggesting mischief, like "Peck's Bad Boy," but with plenty of animals and children, though not of the Greenaway short-waisted, doll-faced type that never grow up, and which charm adults, but cannot compete for the suffrages of children with the rough daubs of Struwwelpeter.

When the child can read and its soul can take flight through the vast psychic spaces represented by books, there are also *new* possibilities of degradation, moral, physical and mental, and just as, since charity is now a science as well as a virtue, we must not give doles to beggars indiscriminately lest they pauperize and besot, so we have no right now even to teach reading without taking every possible precaution that the vast-

ness of new opportunity cause no decadence or bring muddle, for nothing is more dangerous than great ideas injected into small minds, or lurid tragedies made the habitual diet of excitable souls, as in yellow journalism. Possibly the world's best is too *great* and just barely possible its undiluted best is too *good* for some children. Books true to life and that interest are sure to have some bad characters and acts in them, but perhaps the pale bookish way is the best in which to make children acquainted with the inevitable evil they must know. Even the Sunday school library, the function of which is now happily growing, must and does not now exclude all but goody books.

Differences in reading tastes between boys and girls, which are very slight in early childhood, not always sufficiently known or taken account of, appear several years before puberty and thereafter increase rapidly. These differences are so spontaneous and universal, so well established by many statistical studies by various methods upon so many thousand children (the chief references to which I here append) that they should be duly recognized by librarians, teachers and parents. These are among the most interesting and important revelations of how very diversely nature has decreed that the soul of the two sexes should develop. Chief among these taste differences are the following: Girls usually read most books. If they do not acquire the habit earliest, they certainly maintain it after that of boys' has begun to decline and some censuses indicate that they read most at all ages. Even at those ages when they certainly read most, viz., the later teens, they read fewer different books, that is, a larger number read the same. Girls rely more upon the recommendations of teachers, older companions, and others, while boys show greater independence and individuality of choice, and hence use on the average a wider range of books. Girls read what others read, while the books others know have less charm and sometimes almost repel boys who prefer to be ignorant of what all others about them know, and to interest themselves in what none or few others have read. Again, secret and clandestine reading of literature that is condemned, forbidden or disapproved is more common among boys, for prohibition attracts them and arouses their curiosity. They more often fall victims to the literature that it is a crime to print, circulate or own. The vast amount of this literature now confiscated and destroyed by the purity societies shows at once the extent of the danger and gives hope that protective agencies against it are becoming more effective. In the teens, boys often look somewhat askance at reading recommended to them by lady teachers who often quite fail to understand how widely their tastes differ from those of girls. With the present

feminization of teaching, therefore, boys are more uncontrolled in their reading. This, I think, we may connect with the oft-noted fact that men, young and old, often condemn much which they used to read when young, while women are more prone to advise others to read that they did when girls, their mature judgment more often coinciding with their childish tastes. Both sexes love literature about animals but in a different way; girls preferring accounts of pets and domestic animals, while boys care most for the literature of wild, savage beasts, and for hunting. Girls love cats, which ripening boys often abhor, strongly preferring dogs, often sharing the enmity of the Canidæ for the Felidæ. This may be atavism, for men were huntsmen of old, while primitive women domesticated nearly all the animals that serve man.

Again, boys read most history, science and travels; girls most novels and poetry. The historic interest of the latter is more often personal and biographic. Boys love adventure, girls sentiment. Women writers appeal far more strongly to girls in the teens than to boys, for whom at this age few women can write attractively. In childhood, both sexes are interested in fairy tales but girls most, and while boys practically cease to care for them by the fourth or fifth grade, girls' zest continues through the sixth, seventh and later. Girls care far more for niceness, whether of style, binding, illustration; treat books better and are more amenable to library rules. As between content and form, girls care relatively more for the latter, boys for the former. Girls love to read stories about girls which boys eschew, girls, however, caring much more to read about boys than boys to read about girls. Books dealing with domestic life and with young children in them, girls have almost entirely to themselves. Boys, on the other hand, excel in love of humor, rollicking fun, abandon, rough horse play and tales of wild escapades. Girls are less averse to reading what boys like than boys are to reading what girls like. A book popular with boys would attract some girls, while one read by most girls would repel a boy in the early and middle teens. The reading interests of high school girls are far more humanistic, cultural and general and that of boys is more practical, vocational and even special. Girls' interest in love stories and romance is earlier, far greater and continues longer than with boys and the same is true, although to a somewhat less extent, for society tales.

Reading crazes seem to be experienced in some degree at some time by the majority of school children. Some read for years with abandon and intoxication, rushing through an amount of literature that would seem incredible were not the evidence so abundant, while with others the passion is milder

and briefer. It usually occurs just before or perhaps in the early teens when it seems as if the soul suddenly took flight, awakening with a start to the possibilities of transcending the narrow limitations of individual life and expanding the personality toward the dimensions of the race itself as if trying to become a citizen of all times and a spectator of all events. This is one of the most interesting phenomena of youth standing tip-toe on the mount of expectation as the vista of life first bursts upon his view. Those who experience this in full measure are never the same thereafter. It seems to occur somewhat earlier in girls than in boys, and to more often cause a bifurcation of the inner life of idealization and fancy with the outer life of dull and often monotonous daily routine, especially of a girl's life in school or home. In reverie, she dreams of wealth, splendor, heroic wooers who take her away to a life where all desires are fulfilled, where the possible becomes actual and castles in the air materialize. This also often makes the future seem so rich and full that some disillusion is inevitable later. Boys in the book craze also sometimes read away from life, but feeling that their destiny is to be of their own making are more liable to be spurred to action, occasionally, to be sure, to run away, to fight Indians or become bandits or beat their way to a city and to fortune, but usually to strive to achieve more legitimate ambitions, to win fame, fortune, beauteous maidens and to do great deeds. Ruskin and others since have deprecated the danger of such passionate devotion to the reading of the best things life has to offer him lest ordinary life pale by camparison and become humdrum and insipid and home and parents seem stupid and commonplace; but is it not on the whole well to feel strong and early the spurs of that discontent which is the first step to the betterment of both self and environment?

There is still a far too wide difference between the reactions of children to spontaneous reading and to that prescribed for them by adults. From eight or ten on into, if not through, the teens, every statistical study yet made shows a rapid rise in the amount of reading chosen by the children themselves, while both Barnes and the Hartford Report show a striking decline in the stated reading which the school demands. Though it be done, it is with steadily declining interest. The ponderous list of the Wisconsin State Superintendent in 1902, of 1,588 books for high school libraries selected chiefly by principals and college professors, a list outside which it is illegal to purchase either books or editions with library funds, seems to me a good modern instance of an organized attempt to control pupils' reading by adults without sufficiently consulting their tastes. The same is true now to a greater and now to a less

extent, of half a shelf of books, pamphlets and articles I have collected (the 100 or 500 best books, standard child libraries, courses of reading, sometimes approved by formidable lists of literary and other great men and women, etc.). Some of these lists omit many of the good books that children would have voted in, had they been consulted, while others contain most of them, but with nothing to designate their popularity with juvenile readers or to distinguish them from adult prescriptions. It is already possible, however, to make a good beginning of a juvenile library of books children of each age prefer and one of the chief needs of the day in this field is more statistical data of what they love best and a canon of child classics or Bible compiled from their suffrages or of what they most often recommend to each other. Those are greatly in error who think we have solved the problem of children's reading. We have, in fact, just begun to see its dimensions. We can, however, already (1) perceive some great crying needs of books of a kind which do not exist, (2) discern the outlines of a method of selection not yet applied, and (3) some principles of elimination by which an index expurgatorius could be begun. Let us consider these.

I. We need a series of animal and bird books of which as yet I have never seen a single proper specimen; for instance, a monkey book, a book devoted to the wolf, one each to the fox, bear, lion, tiger, elephant, dog, eagle, ants, bees, wasps, and two or three dozen other forms of animal life. In other words, there should be a child's animal library, and here some publishers or authors are certain to make fame and fortune as unexpected as that which came from the Teddy bear, from Uncle Remus 'Brer Rabbit,' from Black Beauty, or in the Middle Ages centered about the living totem of the lower classes, Reynard the fox, of which a thousand editions are extant. The veins of interest here are comparable to those producing natural gas, oil, coal and other great resources when their richness was first perceived and great results are certain, provided only the exploitation be right. Certain principles can be laid down with confidence as follows: Each of these books must be very copiously illustrated, often in colors, and all the recent nature books, not faked, must be cross-sectioned and laid under tribute. Let me describe one or two of these ideal but as yet non-existent animal books for the young, beginning for instance with the monkey book. It should first describe from all available resources the life habits of typical species, how they live in troops, their leaders, their battles with each other and with the enemies to which they are most exposed, how some of them break up into family groups at the pairing season, how they carry and care for their young, the daily routine of the male

and the female, the dangers to which they are exposed, their food habits, how they sleep, their migrations, their organized forays, their diseases, parasites, reactions to extreme heat and cold, their language—all these compiled from trustworthy sources now so accessible, copious and well known, but widely scattered. While true to fact, the style should be lively and the anthropomorphism frankly seen, to awaken and sustain humanistic sympathy. Another chapter should be devoted to the monkeys in captivity, their domestication, characteristics of species and in these their training, its methods and results, with biographical sketches of famous apes, particularly the four great species now living, chimpanzee, gibbon, orang and gorilla, with plenty of authentic anecdotes, etc. Another section should tell of monkey myths from the ancient Hindu war against Ballin, king of all the monkeys, to the way in which primitive races that know them best regard them, with fables of their imitativeness and others traits from Æsop down. Then, too, there should be a brief and popular story of the surprising results of recent experiments upon ape intelligence and educability. In another section for older readers there should be a few skeletal comparative plates showing species and the relation of their frame to that of man—perhaps all on a single page with another page of comparative embryological development, and one or two more to illustrate comparative anatomy of other organs and one or more outline maps should show the habitat of different species which should be represented by cuts as numerous as in Brehm. In a page or two there should be a brief statement about the fossil monkeys, particularly the great ones ending with the Java pithecanthropus, the missing link, and a paragraph should state some of the Simian traits in men and in babies. What is wanted is a general survey of all that is known with stress not upon morphology, but npon behavior,—all condensed, simplified, humanized, richly dight with moral and copiously studded with incident and story in a way to awaken sympathy and give knowledge of the forms of animal life nearest to man—possibly his cousin, having a common but yet undiscovered ancestry.

So a comprehensive dog book constructed on somewhat analogous principles with a little about pedigree, domestication, and many cuts of breeds, a great deal about disposition, the manifest services which dogs have and still render to man, etc., is another need—their courage, devotion, stories, poems as numerous perhaps when brought together as those on trees collected by the writers of Arbor Day monographs. With this might go the very educative experience for a boy of owning and caring for a dog. Nearly every trait of human character is seen intensified and simplified in the instincts of the canine

species, so that a good knowledge of dog psychology and ethics is one of the best pedagogic introductions to the study of human nature, and the same would be true with variations and diverse degrees of the other books.

Such a library would awaken a deep and often dormant interest in the parents themselves and bring them into closer rapport with childhood. Children have a right to revisit thus the ancient paradise of the race when men knew more and lived nearer to animals both hostile and friendly and often worshipped them or derived their descent from them, for they have been on the earth indefinitely longer than man. Lacking this there is in the child's soul a missing link greatly needed in education, a vacuum which may be filled by the regenerative psychic tissue of morbid fears, perhaps of imaginary creatures or by cruelty, but I can only suggest this and must pass on.

II. Another crying need of childhood for mental pabulum even in this age of juvenile books is for condensed and simplified stories of the great mythic cycles, epics and classics that arose and took form in the youth of all the great races that loom up in history. There is a rich mother-lye of culture that has vitality enough to survive for ages before and without the aid of print and which constituted about the whole of the educational material of older days. When this shoots together into such ethnic monuments as Homer, the Niebelungen, the Arthuriad and the rest, it welds tribes together into races. To this, far back though it be in time, the soul of youth is nearer than it is to the last election, for where the world is young there youth belongs and is at home. I have several score of books epitomizing this material for youth, and although they are of different degrees of merit, the best of them do not, in my opinion, quite fit youthful nature and needs. To bring them home and to bring out their full power, they must be fluidized again and their material put through a long and laborious process not all unlike that to which they were subjected in the dim ages of the scalds, bards and other transmitters and molders of tradition. This is a new and great pedagogic demand and next step inevitable, I am optimist enough to think, because needed. It will require the co-operation of many people and many years to complete it. These great classics of the world must, in a word, be re-edited jointly by teachers and other adults on the one hand working with children somewhat as follows. Let each who enlists in the work select some story, be it Orestes or Hamlet, Ajax or Philoctetes, Faust or the Wandering Jew, or any one of a hundred others, master it, feel all there is in it, and then tell it to children as effectively as possible, but always have them, after a brief interval, give it back in writing or orally in order to show just what parts

and phrases sunk deepest, were retained with the greatest fidelity and exerted the greatest influence upon the youthful soul. Upon this basis, the telling version should be revised and recast and the story told again and given back until at last, like an actor who has played the same part for years and may have changed it to something quite different from and more effective than what the author made it, he can say—this story thus told best fits children of a certain age, for instance, in this form those of six, in this those of ten, in that those of fourteen, etc. When many have done this for many of the best story radicals, we shall have begun to evolve a true child's canon of the great classics of the race. These versions should be shorter, simpler and very different in many respects from the originals and from the editions lately made by editors in their studies without the aid of children, but immensely more effective. May we not say that every child might demand as a right long withheld to feel the power of these great, supreme traditions of mankind? They are charged with moral power, mental stimulation and æsthetic inspiration. No creation of individuals can approach them in either of these respects. They are like the eternal stars, while our contemporary *ad hoc* stories are like tallow dips which may obscure the light from the planets themselves, merely because they are so near. Occasionally, the text itself of these old legendary themes cannot he improved on for the young, but there is always much that needs to be elided, much to be condensed, perhaps still more that needs recasting in form and may be made very telling, while if read as it stands in the text, it takes no hold whatever. Some great themes, like for instance, the Golden Age and Paradise, still need original mosaicking and editing, and could then, as Pfleiderer says, be made of great worth. Now enough of this editing has already been made to show both its practicability and its great educational value. One of the chief pedagogic tasks of the rising generation, then, must be to re-edit these grand mental sources which have made nations and races, which have been the nucleus about which culture and nations have evolved *pari passu*. Some of them have been reconstructed many times by master minds for adults, but children have as much need of them as of the homunculi called dolls or reduced adults or of toy engines or the many other masterpieces of mechanical simplification in the form of playthings. Why should not the story-tellers league with its 5,000 members essay this task? Nearly a score of years ago the French, when their education began to be laicized, commenced to sift over all their own literature and history in quest of the tales, incidents and proverbs illustrating honor, glory, self-sacrifice, etc., for a moral inspiration to fill the ethical vacuum left by the elimination of Scrip-

ture training in the schools. The labor involved in our task is a yet higher and harder one, but is also more needed, and that it will be achieved I am convinced with no shadow of doubt, for youth must be served.

III. A third new type of child book we need is an account of primitive and savage life. Frobenius in his "Aus den Flegeljahren der Menschheit" has shown almost like a revelation what can be done and how the right article is welcomed. He was an anthropologist and has compiled with over 400 cuts a simple story of how the lower races live, hunt, play, weave, manufacture, cook, eat, sleep, fight, their myths, religious ceremonies, family and tribal organizations, etc., laying the vast resources of ethnology under tribute to show the young how the great majority of men who have peopled this earth in the past, and a good fourth now living, actually meet the problems of life, regard sun, moon, stars, sea, trees, animals, fields, fire, lightning, the clouds, and think of the origin and end of man and all things. All this is very near to the child. Infection betimes with knowledge of these primeval forms of life and mind at the fit age when contagion is easiest is like vaccination which renders immune many forms of vice and hoodlumism later. The German language, Közle tells us, has 914 words in common use for children's faults and less than half that number for their virtues, for evil is far more varied, striking and, in a word, interesting, than uniform moral correctness. Here, then, is another line of juvenile literature needed and, therefore, sure to come.

I have only touched a few points in this vast field, but I cannot close without an earnest plea for more oral story telling ways of introducing books to children. Mankind heard and spoke for untold ages before they wrote and read. The ear and mouth way is shorter and vastly more effective than the long circuit tract of pen wagging and taking in meaning from the printed page by the eye. In the great literary eras in France conversation gave the style to books, and in the dull periods conversely books gave the style to conversation and people talked bookishly. Thrice happy the child who makes its first acquaintance with the great monuments of literature which arose when the world was young, not by reading, but under the spell of the story teller's art! Thus, till lately in the world's history, all knowledge was imparted from the grown-ups to the rising generation. Thus the great men and women and heroes of an elder day that letters depict lived on from age to age, and the tales of them slowly took shape edited by the folk's soul into the great mythopoeic masterpieces, for these are the quarries out of which the master workmen in literature obtain their material. In early plastic oral form these were

meaty and condensed and grew to have a chiefly ethical content almost in proportion to their age. Next to telling is reading to children, and for one I care not how much even this function encroaches upon school time or breaks up its routine. As to reading, and especially at adolescence, it is chiefly to satisfy the feelings which then and thereafter are three-fourths of the soul and represent the life of the race, while the intellect is chiefly an individual product and therefore more accidental. Four great definitions of education by four of its greatest prophets are that it consists of learning to fear aright, to be angry aright, to pity aright, and to love aright, and thus the instincts and sentiment are tuned to the world without. Girls, who cultivate heart must, of course, have love stories, and although they must be pure, there must be enough of evil to suggest adequately some of the degrees of vileness in the world, though always with the triumph of virtue sure in the end. Literature should perform moral choices, which having acted aright in ideal cases will be more likely to do so in real and trying emergencies. Urgent as are practical needs in our age and land, librarians seem now likely to be held more and more responsible as guardians of all those educational agencies that take the individual out of his narrowness into the larger life of the race. Hence, I believe you are only just at the beginning of your task of ministering to the young.

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THE FUNCTION OF MUSIC IN THE COLLEGE CURRICULUM[1]

By G. Stanley Hall

As a mere layman in music I accepted your invitation to speak upon this vital subject with great diffidence and only after much hesitation. I am here because I wish to plead for a few things which, as a psychologist and educator, I do not think academic teachers of music sufficiently recognize. I will put my points categorically in the hope that I may profit by your criticisms.

I. Musical culture in its large sense is the most liberal and humanistic of all studies, perhaps not even excepting literature. Thus, from this, it follows that there is no subject in the high school and college curriculum that should be taken by so large a proportion of students. About every young man and maiden should do something with it. Why do I make so large a claim? Because music is the language of the feelings, sentiments and emotions; or, in a word, of the heart, and because these constitute three-fourths of life and all of them come into being or are immensely reinforced and augmented during adolescence which covers all the early teens and the very early twenties. Speech, on the other hand, is the language of the intellect, but the feelings are older and vaster. The intellect is chiefly a product of the individual development, but the heart represents the race and is hence more generic and basal. We Americans are more prone than any other race to be defective, ungemütlich, more liable to have our emotional life grow sterile and desiccated. This it is the function of music to restore, deepen, enlarge, intensify and express. Our very language is prone to be deficient in action, feeling and speech music. If we have feelings in youth, we soon come to deem it good form to conceal them, even if they are good and wholesome, although thought itself, if not painted and toned by sentiment, is arid and dead. Music makes the world tinglingly real again. It restores the soul to meanings, and the great tone poets who organized the sound world take us out of our narrowness into the universe and make us feel the cosmic powers. They add new

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and brighter colors to the palate of experience and not only discipline the heart but free us from false, frivolous, languishing, bad feelings, create new blends of them and give us the more and fuller life for which we pant and of which our nerves are scant. Music, like God, sees only the heart. It is a language of quintessences, the only perfect philosophy and true metaphysics. Modern æsthetics shows us in great detail how national and historic music reflects the *soul* of races and ages, Greek, Italian, Teutonic, French, etc. In such phrases, which represent the essential view-points of Schopenhauer, Helmholtz, Gurney, Harweis, Stumpf, Halich and others how can we avoid drawing the momentous practical inference that more and better musical culture is one of the chief needs of our age and land? So my first plea is for more extensive musical culture, that almost all our academic youth learn to sing or play or, at the very least, be taught to know, love and more intelligently appreciate good music in order to normalize and regenerate their emotional life, to make them feel country and nature in all their respects, religion in all its breadth and depth, home and native land, to sanify and idealize the affections and even war if in the course of human events it should become necessary to risk life for country. Relegate to the second or third place the technique that all teachers tend to push to the foreground and constitute yourselves guardians responsible for the vigor and healthfulness of the emotional nature of the young. Break the iron law which tends in the kindergarten to put Tonic Sol-Fa in the primary school, intellectual instruction in staff, scales and intervals in the grades, and the theory of harmony, counterpoint, orchestration and instrumentation in the college and university ahead of wide acquaintance and intimate heart to heart appreciation of a generous repertory of masterpieces. A German fifth grade class I once visited could sing for me any one of fifty chorales or folksongs by heart; but could not yet read notes. How many of the great composers knew the intricate theories of super and subdominant triads, dispersed harmony, inverted suspensions, or could have passed one of our college examinations in Spalding and Chadwick? Too much technique, too early and with too little familiar acquaintance with music, is the letter that kills. I know a high school that had a vigorous choral union of seventy instruments and voices combined and which gave half a dozen concerts during the year of, on the whole, very good music until a university hard by heard of it and decided to give credit for entrance examinations in musical theory with the result that the half dozen leaders withdrew from the union (which soon collapsed without them) to study theory from books.

Some American colleges encourage banjo and mandolin clubs, composed usually of two or three crude amateurs who can snap off a few popular catchy and perhaps even 'kicky' airs and a larger number of accompanists who can just play a few chords, and permit these organizations to give concerts and perhaps to make tours occasionally contributing to their expenses. Often glee clubs are organized on a similar low level, who croon college ditties of the Polly-wolly-doodle or Mary's Little Lamb order. The fatuity and utter banality of the words and the cheapness of the music of the lowest strata of college songs soberly sung by rows of stalwart college barbarians in evening dress often suggests downright infantilism. The fun of it all has a pathetic tang for every musical connoisseur, and when such clubs essay serious sentiments, these are all so crude and lush that such performances constitute a unique badge of our national (academic) inferiority in music. Institutions often think such concert tours valuable as recruiting agencies because callow youth of the home town admire and wonder and are made converts thereby to the higher education. In the programmes there are usually samples of ragtime and of the latest, lightest comic operas to which admiring audiences beat time. Perhaps all this has its place, a touch of it but not too much of it, but it belongs to the fraternity house, the athletic field beside the college yell or lower down in the high school. Its elemental rhythmic quality is basal as the tom-tom and has its place, but like much of our school music, it belongs to younger grades. At any rate, most of the best agree that this is a musical level which the college should now ignore and which a department of music ought to discourage, because over-cultivation of this stage is very easy and, where it occurs, it tends strongly to arrest the higher development of musical ability. I am convinced that many American collegians are now suffering arrest from the hypertrophy of this crudest and most rudimentary form of musical propensity—and among these I must, alas, count myself.

II. As to musical training for intending school teachers, great disparity is found even in colleges which have both a normal and a musical department. Some even of the latter make no provision for teaching music to the pedagogues that seek degrees from them, professors holding such work to be too elementary for them to engage in or having no time for it. In most such institutions something, but too little, is done and that little is almost always ill-adapted to its purpose. In these respects we have very much to learn from the higher normal courses of Europe, and especially those of Germany, where the theory and practice is roughly as follows. The very first consideration is the sentiment taught or reinforced by the music,

for here lies its chief educational effect since it can train the heart as nothing else can do. The theme of most vocal school music is either nature, home, country or religion, and its value is chiefly measured according to how much it can do in strengthening loyalty to these. Next comes the quality of the music itself, and of course all the works of the great composers are ransacked to compile from them a curriculum or canon of the best. The teachers must know several scores of selections both words and music by heart, and be able to teach them by rote. Folksongs and ballads lead, and next come simple, but often exquisite selections or simplifications from the great composers. Every academic student preparing to teach in Germany must not only know a large repertory of such songs, but must play the violin or piano, the former usually preferred, especially for rural schools. Nearly every teacher can, and must sing a little, and most of the music in the folk schools is taught by regular teachers and not by specialists. To fit young men and especially young women for such work is the chief function of this academic department. Everything technical is subordinated to the spirit abroad, thus, music is felt. Here, on the other hand, colleges train prospective teachers, if at all, chiefly in technique, note reading and with only the slightest regard to the quality of the music or the subject of the song, while the publishers sell annually tons of juvenile music books chiefly devoted to method, to analysis of processes that never ought to be analyzed, at least for novices, inane exercises, cheap songs, many of them manufactured by the authors of the text or selected almost at random with little regard to educational values; but often for purely methodic reasons. Just as bad English teaching almost invites slang, so unpedagogic musical instruction invites the cheap kind of music which is often a positive obsession that haunts adolescence in high school and college and leads to the kind of musical emporium I discredited above, for musical jingles that cannot be banished from the mind, but cling like burs, are products of bad musical education. The college training of future teachers here needs two things: first, far more special attention and time, and second, a radical reconstruction of both its matter and methods. I wish this Association would appoint a committee to review this function of college departments of music.

III. Another function of collegiate instruction in music is to cultivate in those who will never become performers good taste and the power to appreciate and understand music. This is often a specified function and is one of the purposes of college concerts, recitals, festivals and of some of the courses, especially those in the history of music and the biographies of musicians. As a branch of all truly liberal culture, music can

now claim a high and ever higher place. Modern psychology and æsthetics can hardly lay too great stress upon the educational value of familiarity with the great works of the best masters for young men and maidens. The coming theory is in outline, that good music faintly awakens the echoes of the ancestral experience of the race and causes the psychic traces and rudiments of what our remote forebears did, suffered, feared, loved and fought for to reverberate again in our souls. The great composer wakens these dying echoes and causes the soul to crepitate with prehistoric reminiscences that can never surge up into the full light of consciousness. As the murmur of the ocean shell held to the ear, poets tell us, relates the secrets of the deep, so music puts us into *rapport* with the lives of the great cloud of witnesses who constitute our ancestors back and down we know not how far, perhaps to the earliest forms of mammalian or even vertebrate life, or even lower. We remember the phases of the past estate of the race from which we sprang and rehearse, if ever so faintly, its joys, sorrows, victories, defeats, longings, exultations and depressions. The soul becomes a resonance chamber for any and every, however slightly revivable, reminiscence not of a pre-existent state in Plato's sense, but of the experience we inherited from the long line of our predecessors who have bequeathed to us each the quintessential residue of their life history which music puts into our possession. Thus, by a sympathetic appreciation of music the soul revisits the dim racial past, communes with the countless generations gone before, participates again in their fate, pastimes and fortunes, so that in a sense they awaken and rehearse their story in our souls.

But music is not only recessional, but processional. It is inspired with the ennobling push-up toward the superman that is to be. Thus we expand the narrow limits of our own individuality toward the dimensions of the race and the past and future. This interpretation of musical feeling is not sentiment, but is now a science and evolution, or more specifically, it is genetic psychology. The golden age of musical appreciation is the decade of adolescence, say from fourteen to twenty-four, when the soul needs and responds quickest to all the vastating influence which is great and beneficent beyond anything in literature or any other art.

Thus I urge that the greatest of all the functions of college music is to acquaint not only special but general students with a wide range of the best music, to insure not only acquaintance with, but infection by the great masterpieces of all lands and ages. In many colleges, students can hear but pitifully little good music, and in all I believe that the function of listening and the detailed acquaintance that can come only by

repetition should be a much greater function than it now is. The Æolian, the Cæcelian and Pianola should not be despised and should be vastly more utilized in every school of music. These mechanical players are admirably adapted for the analysis of musical structures, for the study of style, movements, composition and the vast and rapidly growing body of music now playable from paper rolls is a Godsend to every one interested in music, whether lay or professional. These enable the student to widen the horizon of his knowledge, cultivate taste, discrimination, intelligence, and thus enhance his appreciation of the performance of great artists, orchestras and choruses. Many colleges advertise in their catalogues the number of scores in their musical library. They should no less prize and announce the number of players and the repertory of music provided for each. That a growing use, both in class and personal study will be made of these inventions, and that all their great pedagogic value will be utilized to the uttermost sooner or later, there can be no shadow of doubt.

IV. Again, I plead for a richer and better course in the history of music from its beginning on to the present. It is a wonderful and magnificent story, beginning with the crude incessantly repeated rhythmic phrase on to homophonic melody, moving about independently of the key-tone like the old tragic chorus, the intonations of the church, and the Italian declamatory recitative. The polyphony of the tenth and subsequent centuries wove independent melodies together, assigning little value to harmony as such. The evolution of the major scale from the old Ionic and of the minor out of the other five antique scales, the development of the progress from madrigal to opera, in tragic chorus to oratorio, the evolution of pure instrumentation, are all fascinating chapters. In such a historic course, which should be thorough and prolonged, all should centre about actual music, and the standard productions of the great masters should be incessantly repeated and the story of their lives known. Such illustrations are now practical in these days of mechanical players. This historical course should not only be broad and thorough, but the point of departure for every other department. Growth responds to growth and genius provokes response and appeals profoundly to the faculties of youth, for progress is inspiration to the young. Every great composer of the past should have his week or month of daily work, and every great era its full term of exclusive study, and everything should be practical, with a rich historic perspective. Thus something or some one will make a special appeal to every student, even those who cannot appreciate the latest and most evolved styles and writers.

V. The first accessory to musical education should be

mythology, especially the great mythopoeic themes and cycles that have made so many of the great dramas and epics of the world's literature, and which constitute the grand ethnic Bibles of races. The traditional material which has vitality enough to survive for centuries and millenia by oral transmission and without the aid of print, this should be the constant study of every candidate for a musical career or degree. Wagner has only suggested to the world the possibilities of musical inspiration that lie in this field. He revealed and revived the Germany of pre-Christian centuries, the legends of the youth of the world, the heroes that loom up from the dim past, the great man of earth, its prophets,— the story of the Golden Fleece, of Orestes, Agamemnon, Prometheus, Iphigenia, Electra, Ajax, Æneas and Dido, Siegfried, Brunhilde, Parsifal, Arthur, Beowulf, illusions that centre about a Golden Age, about national redeemers — material that historians reject but that folk-loreists and students of the origins of literature reveal. These are what the musician ought to know who wants to be a prophet and apostle of the folk-soul and make its creations live again. He should know and feel the most characteristic and dramatic situations and find in these the source of his inspiration setting the grandest editions of the race to music before attempting its purer forms. Thus, when it comes to composition, the novice should not forget that the individual repeats the history of the race and first essay some simple melodies to sweeten and enforce old moving folk poems, for these ancient mythic themes speak to the heart of love, piety, heroism, and it is in the interpretation of these that creativeness is most favored. Let the young composer, then, first essay songs richly set in gesture, posture, pantomime and declamatory action, for out of this music arose, for tone and tune once only reinforced words and meanings. Thus, I urge that infection with much of this legendary myth material should always be prescribed, and that the department of literature represented by the old epic, and the great stories of ancient and modern drama should be the first outside course insisted upon for the young musician, long before acoustics of tone and even before the French, Italian and German languages, which, of course, every graduate of a musical course should know.

VI. One very pertinent point is the effect of music upon the nervous poise and control of those who love it. The very neurons may be musically famished or overfed, may be tense and overwrought with incessant occupation with tedious and familiar elements or thrilled and exhilarated by great compositions, old or new. Between all these extremes there lies always a normal optimum which every musician should find and live

as near to as possible, equidistant from every kind of excess or defect. Music that calms should thus offset that which excites; that which rests should relieve us from that which fatigues. Nearly all musicians have here a unique problem with their own nervous system which only they can solve, but which must be solved as seriously as one seeks salvation. When we meet broken down musicians in nervine hospitals and asylums, this problem has passed beyond their own power to solve alone, but there was a time when nearly all could probably have saved themselves by proper insight and regimen. I am convinced that it is not music itself, but the fact that the kind of music most habitual is a misfit which is chiefly responsible for the neurotic and neurasthenic states into which musicians, especially lady teachers of it, sometimes fall, and that music has a great as yet unexploited power to heal its own wounds. In proof of this there are clinical records that could be cited. Of course we have yet much to learn of the sanifying and insanifying effects of music, but the fact already stands out that the highly unstable age of youth is most of all sympathetic to both these influences. Again, even purely instrumental music not only has hygienic, but moral quality and influence, and this, although not definable, is easily detectable. It stimulates the highest as well as the lowest powers. It may evoke morbid languishing patheticism that chills the joy of life and zest to insipidity, or it may make the world seem more real and joyous and life more earnest, and endow every experience with enhanced worth. The moods which it commands constitute, after all, its deepest and most lasting value or harm, and especially to the plastic and susceptible stage of student life. Only those who have systematically collected confidential youthful confessions of how music brightens and exhilarates or depresses and dismalizes life can realize its usually but little suspected potency over the soul in its struggles up to full maturity, and it is chiefly this that had the theme assigned me permitted that I would have preferred to spend my time in trying to bring home to the better knowledge of college professors of music, who have doubtless all felt, but probably forgotten, as we do most of those very deep, but essentially transient and lapsible experiences of the seething age of the later teens and early twenties.

VII. Finally, music gives us confidence in, and respect for, human nature. One reason why we enjoy a great work of musical art is that we realize that it was produced more or less spontaneously out of the depths of the soul of a genius, and hence we feel that his soul is sound to the core, and since the power to appreciate is a small degree of precisely the same kind of psychic energy that creates, we feel that we, too, are sane

and healthful in the depths of our being. Helmholtz is right that the art connoisseur abhors chiefly the signs of conscious and deliberate purpose to produce this or that result by this or that means, and wants instead purely instinctive irresistible spontaneity. The composer must sing as the bird sings, because he cannot help it. Music is thus a message to the ordinary and more superficial conscious and self-conscious life from the profounder regions of the unconscious and instinctive substrata of the human nature which constitutes nine-tenths of life—a message which says "all down here is beautiful, harmonious, and there is overflowing superfluity of vitality." This is the voice of the race saying to the individual "You may be sore bestead, weak, vacillating, ignorant, in doubt, but, if your bark sinks, it is to a largess, and there are everlasting arms beneath in your own soul." It is the heart out of which are the issues of life, irrigating, refreshing, informing, reinforcing the dusty, moiling intellect. Hence it follows that there may be too much and too incessant analysis, criticism and self-consciousness in our academic curricula. We can no more create musical genius here than in other fields. All greatness is more born than made, but more easily than in other fields we can destroy the buds of genius by superfœtation of precept, mere erudition and theory. Musical appreciation evokes musical creativeness and it is music itself, much of it and often, that inspires and not the discussion and technique that teachers tend to lapse toward almost in direct proportion to their inability to create or even to execute. As in all other branches, here there are teachers of music who are musically sterile and exhausted, and is it not they who are more often the methodasters prone to magnify pet devices? It is at any rate when theory is predominant that music tends to become manufactured and made by rule, perhaps correct, but contentless and dead, with no message or gospel from the over-soul to us.

Thus, in a day when psychologists are realizing with one accord that the feelings are far vaster than the intellect and will and are more important for health and sanity, it is clear that you more than any other class are charged with the custody and responsibility of the hygiene of the emotional life. Do you sufficiently realize that music may enfeeble, corrupt, seduce, degrade, let loose the worst things in the soul, that it may bring neurasthenia, loss of control, neurotic instability, pollute the very springs of life, as well degrade taste to tawdriness and puerility, while, on the other hand, good music may almost create virtue and tune the heart to all that is good, beautiful and true, bring poise, courage, enthusiasm, joy of life, tone up weakness and cadence the soul

to religion and morals? Just as there is a literature so bad that one had far better go through life illiterate than to read, so there is music so corrupting and neurotic that the densest ignorance of this great art is better than knowledge and acquaintance with it. This moral and hygienic quality of music is the theme on which I would have preferred to spend my time, but I will only say in closing that it is a fact now as it was in the days of Plato who would banish the Lydian and Ionian musicians retaining only the Doric and Phrygian, that precisely this distinction between moral and immoral music is perceived just in proportion as an age is endowed with true musical gifts. Lack of these ethical and educative characteristics is our predominant national musical weakness, for the chief of all problems in this field is the effect of music upon the morals and the nerves.

PORTUGUESE EDUCATIONAL HISTORY: THE BEGINNINGS OF PRIMARY POPULAR EDUCATION.

By Alexander F. Chamberlain, Clark University, Worcester, Mass.

Portugal, whose single university at Coimbra is one of the oldest in Europe, is neither without its great men of the past nor lacking to-day in educational reformers able to appreciate the results of modern science and investigation. The history of education in Portugal is, however, little known to the English-speaking world, in spite of the close political ties which have from time to time existed (and still exist) between that country and Great Britain. The long connection of Brazil with Portugal and the fact that some of the educational experiments were first tried in the colonies make the subject interesting to the people of the New World.

Within the last few years works by Portuguese writers have appeared covering almost every aspect of educational history. F. Adolfo Coelho, Professor of Comparative Philology, and a folklorist of world-wide reputation, is the author of the following essays: *O ensino primario superior* in the Revista d'Educação e Ensino for 1892 (also Reprint, pp. 27); *Para a historia da instrucção popular* in the same periodical (pp. 49-73, 97-121, 193-224) for 1895; *Ensino industrial e commercial* (pp. 48), report to the educational section of the Sociedade de Geographia de Lisboa in 1898; *Le Cours Supérieur de Lettres* (Paris-Lisbonne, 1900, pp. 96); *A pedagogia do povo português* in Portugalia, the anthropological journal, published at Oporto, for 1901-1902.

Bernardino Machado, Professor of Anthropology at Coimbra, who was in 1893 Minister of Works in the Portuguese Cabinet, a man of science taking part in the political life of his country, and, as one of his books shows, a devotee of child study, has published the following educational works: *A industria* (1898), *O ensino* (1898), *O ensino primario e secundario* (1899), *O ensino profissional* (1900), *A agricultura* (1900), *Notas d'um pae as creanças* (1900, 2a. ed., 1904), *Conferencias* politicas (1904) *A Universidade de Coimbra* (1905), Professor Machado is the acknowledged head of the Republican party in Portugal and a notable example of the "scholar in politics."

Professor Coelho's memoir on *Le Cours Supérieur de Lettres*

was published by the Portuguese Commission of the Paris Exposition of 1900, under whose auspices appeared also official Reports on *Ensino primario* (2 vols. pp. 276, 148), *Ensino secundario* (pp. 236), *Ensino artistico* (pp. 128) of anonymous authorship. Likewise the following: Caetano Pinto's *L'Ecole primaire* (pp. 100), C. A. Marques Leitac's *Les Ecoles industrielles et de dessin de la circonscription du Sud* (pp. 115), Cincinnato da Costa e D. Luiz de Castro's *L'Enseignement supérieur de l'Agriculture en Portugal* (pp. 352), Dr. J. M. Rodriguez's *L'Instruction secondaire en Portugal* (pp. 16), E. Castro Rodriguez's *Méthodes d'enseignement dans les écoles primaires de Portugal* (pp. 150), F. F. Dias Costa's *L'Ecole de l'Armée* and *L'Institut Industriel et Commerciel de Lisbonne* (pp. 168), J. A. Celestino Soares's *L'Ecole Navale de Lisbonne* (pp. 65), Sousa Viterbo's *L'Enseignement des Beaux-Arts en Portugal* (pp. 20), F. da Costa Maya's *Collège Militaire Royal* (pp. 98), Rodolpho Guimarães's *Les Mathématiques en Portugal au XIXe Siècle* (pp. 168).

Of earlier works worth mentioning here are José Silvestre Ribeiro's *Historia dos estabelecimentos litterarios e scientificos* (Lisboa, 1871), D. A. da Costa's *Historia da Instrucção popular em Portugal* (Lisboa, 1871), Ferreira do Amaral Cirne's *Resumo da historia da Pedagogia* (Porto, 1881), etc.

In Portugal primary popular education could exist only after the national language began to assert itself in documents and literature. The rise of poetry in the end of the twelfth century, under the influence of Provençal, and the development of prose in the next two centuries, together with the growing importance of the people in the fifteenth century, made possible the first primary school some time before 1439. In the city of Evora then dwelt Esteves Anes, the first known Portuguese schoolmaster, — although tradition would have it that "schools" existed as early as 1375, or even before (Coelho considers this unwarrantable). Lisbon, as documents of 1506 indicate, had private primary schools (for teaching reading and writing) at or before the beginning of the sixteenth century. In 1551 there were in Lisbon 34 teachers of reading and 7 of grammar. At the same time the children of nobles and well-to-do burgesses were taught at home. The development of popular primary education is coincident with efforts to instruct the natives in the colonies. Coelho points out that in 1493 Martim Affonso taught some Congo negroes to read and write, while in 1520 two teachers were sent out to reside with the king of Angola. A regulation of 1529, given to Estevão da Gama, bids him take special care to have the children of the natives taught reading and writing. The "schools" of Cochin are mentioned by Affonso d'Albuquerque in his letter of April 1, 1512, to Don Manuel.

The first attempt to organize pedagogically primary popular education was made by João de Barros, the historian, whose *Cartinha* and *Dialogo em louvor da lingua portuguesa* were published in 1540. In his time, free popular education had begun but the teachers were incompetent, miserably paid, and not infrequently almost, if not quite, social outcasts. They chiefly taught the reading of manuscripts, a curious persistence of mediæval tradition, and the MSS. used were contracts, processes, cartulary documents, etc. Coelho informs us that even in his childhood reading manuscript was still taught by means of similar documents,—the generic name was *sentenças*. Charges of heterodoxy impeded, in the sixteenth century, the growth of free popular education. Lisbon, in 1595, was concerned over the reports that the heretics in certain parts of the country had begun to teach their doctrines in the boys' schools. In the sixteenth century, as a result of Italian influence, Portugal had its learned women, and those who "read Latin," doctors, etc. But some sort of popular instruction also existed. By the middle of the sixteenth century there were in Lisbon 65 women who taught girls to wash and 2 women teachers of reading for girls. By 1619 the number of the first sort had increased to 94. To obtain authority to teach washing was by no means easy, as the the minutes of the municipal chamber of Lisbon show in the case of Maria de Sequeira in 1612, who taught sewing and washing contrary to a regulation of the city.

Shortly after the approval of the order of the Jesuits by Pope Paul III, in 1540, they were introduced into Portugal by Dom João III, and, by the end of a quarter century, they had colleges and schools all over the country,—Lisbon, Coimbra, Evora, Porto, Braga, etc. In Portugal, as elsewhere in Europe, the Jesuits aimed chiefly at procuring recruits for their own ranks from inflential families,—for the common people catechism and preaching were enough. As to the schools for reading and writing they contented themselves with influencing them rather than establishing new ones. In the colonies (Brazil in particular) the padres gave elementary instruction to the children of the natives and the colonists. In 1549, in the Captaincy of S. Vicente the Jesuit Seminary taught, beside religion and morals, Portuguese, reading, writing, and, to a few advanced pupils, Latin. At Bahia, in 1552, there was a seminary for Indian girls, and after that several others like it were established in various parts of Brazil. In 1554 Padre José Anchieta opened at Piratininga the second grammar school (the first was at Bahia) in Brazil. In Pernambuco, towards the end of the sixteenth century schools for the Indians and negroes existed, where religion, reading, writing, etc., were taught. In India St. Francis Xavier and his companions were interested in popu-

lar education only on the doctrinal side. Subsequent documents indicate the existence of schools whose teachers were not always churchmen. Thus an edict of Viceroy Alvor, in 1684, issued to aid in abolishing the use of the aboriginal languages, orders the priests and schoolmasters to teach the boys religion in the Portuguese tongue.

The end of the seventeenth century saw the idea of popular education begin to take root, if we may judge from documentary evidence. By 1619 there were in Lisbon "schoolmasters who taught boys to read and write, 60; fencing teachers, 6; dancing teachers, 7; music teachers, 70. The number of music teachers is accounted for by the tendencies of the age, which was extremely musical. But not until the first half of the eighteenth century were the signs visible of the revolution consummated by the Marquis of Pombal (1699-1782), the greatest of Portuguese statesmen, who, after subjugating the great nobles and their allies, the Jesuits (these were banished), abolished slavery, reformed and codified the laws, reorganized the army, and sought to establish a system of elementary schools (some of his reforms, however, suffered during the reaction under Maria I, who was much subject to clerical influence).

The great advocate of popular education in the eighteenth century was Verney, who was really the first to argue for its general institution. He was also strongly in favor of the education of women. Like Barros, he desired the teaching of the elements of the Portuguese language to precede that of Latin. Rebeiro Sanches, the famous physician, whose *Cartas sobre a Educação da Mocidade* was published in 1760, opposing the views expressed in Verney's *Verdadeiro methodo de estudar para ser util a Republica e a Igreja* (1747) was an energetic opponent of general popular education. Martinho de Mondonça de Pina e Proença, another of the three great educational writers of the eighteenth century (his *Apontamentos para a educação de hum menino nobre* appeared in 1734), had in view only the instruction of the privileged classes and the nobles and paid no attention to popular education. Rebeiro Sanches, however, argued ably for an improved system of education for the classes who did not live by manual labor. He is to be remembered also as an opponent of corporal punishment. Part of his ideas were put into practice by de Farvalho, minister of José I, to whom was written his "Letters on the Education of Youth," a work which paved the way for some of the reforms of de Pombal.

It is a curious fact that in the eighteenth, as in the sixteenth century, the first movements in this direction related to the Indians of Brazil. A decree of the de Pombal administration, issued August 17, 1758, confirmed the establishment in each

village of the Indians of Maranhão and Para, of a primary school for girls and one for boys, in which should be taught religion, reading, writing and arithmetic. The girls were to be taught, in addition, the labors and duties peculiar to their sex. Thus was established a system of education, freed from, even antagonistic to, Jesuit control. Between 1758 and 1770 other steps forward were taken. By a decree of July 6, 1759, was established a general director of studies, who appointed commissioners to represent him. The duties of the director and commissioners were to take part in examinations, inquire into books, assist in the election of teachers, etc. In 1771 the office of director general was abolished and the primary schools and all matters relating to them passed under the jurisdiction of the "Real Mesa Censoria," created in 1768.

A decree of September 30, 1770, conceded two reforms in primary education, advocated by Barros 230 years before, the teaching of Portuguese before Latin, and the substitution of printed texts for manuscripts in the teaching of reading. The reading in school of "litigious documents and *sentenças*" was especially forbidden. Next came the famous law of November 6, 1772, which established in Portugal and her colonies primary and secondary schools and prescribed for them a curriculum. The ideas of Ribeiro Sanches were followed in recognizing "diversos destinos" and a natural "designaldade." Hence, four categories of individuals were distinguished: 1. Rural laborers and artisans, for whom the catechism sufficed. 2. Those for whom reading, writing and arithmetic were enough. 3. Those for whom the teaching of Latin was proper. 4. The small number who would pursue their studies in the various academic faculties. The subjects to be taught in the primary schools were: reading, writing ("making good letters"), general rules of spelling (Portuguese), essentials of syntax of Portuguese, four "operations" of arithmetic, catechism, rules of society (civildade) in a brief compend. The schools were to be visited every fourth month by visitors appointed by the Mesa Censoria, who were to make such inquiries and such reports as they saw fit. The visitors were to be always different, their appointments secret, and the days of their visitations unannounced. Private teachers had to be qualified by examiuation and approval of the Mesa Censoria,—the penalty for a second offence in the way of unauthorized teaching was a fine and five years in Angola. Previously (in 1765) the municipal chamber of Lisbon had prohibited the opening of any school for teaching reading, writing and arithmetic without a licence. The law of 1772 established a "subsidio literario," drawn from taxes on wines and strong liquors, which was to be applied to paying the salaries of teachers of reading, writing, grammar, or of any other teachers of boys.

By the terms of this law there were distributed, according to population, in Portugal itself, 430 teachers of primary schools; in the "Isles," 15; in the Colonies, 24,—a total of 479. Besides these the law of 1773 added 47 more making the total number for Portugal and the "Isles" 502, the number for the colonies remaining as before. Secondary education was provided for by the establishment of 358 teachers of languages, rhetoric and philosophy. Of these Portugal had: Latin, 205; Greek, 31; rhetoric, 39; philosophy, 28,—total 303. The "Isles": Latin, 10; Greek, 4; rhetoric, 7; philosophy, 4,—total 25. The Colonies: Latin, 21, Greek, 3; rhetoric, 3; philosophy, 3,—total 30.

Before one could be a teacher he had to pass an examination at Lisbon before the president of the Mesa Censoria, or before a committee of two examiners appointed by him, at Coimbra, Oporto or Evora, the only three places outside the capital, where such examinations could be held. In the colonies, before a member of the Mesa and two examiners appointed by the president.

Thus were laid the foundations of popular education in Portugal.

LITERATURE.

Sex Equality: A Solution of the Woman Problem, by EMMET DENSMORE, M. D. Funk and Wagnalls Co., New York, 1907. pp. 390.

In the preface the author says: "It is the aim of this work to investigate, from the standpoint of science, woman's true place in nature as compared with man's; to point out those traits and characteristics in which men are superior, and again those in which women are superior; and to trace the causes of those differences."

Admitting that women are as a class now inferior to men in stature, strength and health, the author raises the question of how these differences originated, and adopts Darwin's hypothesis that sexual differences have been caused by selection of the males in their contests for the females, and their struggle for food and defense of their families. These differences, once originated, were cumulative, both because they continued to favor the individuals who possessed them, and because inheritance of such qualities runs along the line of sex. In the same way, woman's disabilities continued to increase, the daughters inheriting more of the mother's acquired characteristics than of the father's. Still further, sex itself is secondary to life and reproduction, depending, according to Hertwig and Geddes and Thompson, not upon the differences in the germ plasm, but upon external conditions of food, warmth, etc., which we do not yet fully understand. Geddes and Thompson contend that in higher animals there is an essential maleness and femaleness, but the author differs from them here and quotes various experiments upon animals in which the sex was varied by variations in nourishment. He concludes that sex characters originated in the environment and have accumulated through heredity and unfavorable conditions for women until the present status has been reached.

But if sex characteristics have been thus acquired, new ones can also be acquired in a similar manner. Men and women are indefinitely modifiable in both directions, and it is easy to see how the present differences in sense and muscular activity, breathing, and habits of thought arose from the conditions under which the two sexes have lived. To make woman man's physical and mental equal, it is only necessary that she should be given the same freedom and opportunities as he. Even in the generation or two of freedom that she has had, we see great improvement in such things as her physical condition, and when time enough has elapsed for the improvements acquired by the mothers to pass down cumulatively to the daughters, we shall see a real equality between men and women. Even with all her disabilities, there are numerous examples of famous women, which the author gives at considerable length, but such cases have been and will for a considerable time continue to be rare exceptions. Women can escape the past only slowly.

Some of the potent forces in aiding them to overcome their disabilities are co-education, suffrage, and entrance into independent earning of a living. The author looks forward to a time when all married women shall continue to be economically independent, arguing that this will promote early marriages because it will enable the income to be doubled at once. He also believes that by the time this is a general

condition, the earth will be so completely populated that no married couple will be expected to have more than two children at most, just enough to replace them when they die, and, as at the same time longevity will be on an average 120 years, the bearing of two children will be a handicap not worth mentioning for any woman. Day nurseries will also be so generally established that all mothers will send their infants to them, and presumably nurses or bottles will be provided, too, though he does not mention this. Such care, in his opinion, will be as superior to the mother's as schools are to home training.

The crux of the argument seems to rest upon the assumption that in order to become "equal" to men women must be relieved of the bearing and rearing of children as far as possible. There may be some heavenly or Utopian land where this can be done and the race still continue to flourish. But when all the available statistics show that the birth rate of all the Anglo-Saxon races is decreasing so rapidly that their days are even now numbered unless the tendency is reversed, arguments resting upon this assumption give little practical assistance to the people of to-day. If we are going to die out in the course of a few generations, the question of equality or otherwise will in any event not press upon us long.

The questions that the educated woman of to-day faces are whether she can raise a dozen or so children and also continue professional life and work in philanthropic or religious or other lines; or if she cannot raise a dozen children or possibly not even one, why she cannot, and what she is to do about it, or whether she wants to do anything.

Superstition and Education, by FLETCHER BASCOM DRESSLAR. University of California Publications. University Press, Berkeley, July 15, 1907, Vol. V, No. 1. pp. 1-239.

The material for this monograph was gathered directly from the minds of young people during their professional preparation for the work of teaching. Each was unexpectedly asked to write out, without communication, all the superstitions they knew, each slip to bear but one, with the writer's honest expression or belief or non-belief in it. He was requested to say that he had either no belief, or belief, or partial belief in it. It should be noted that this study is confined to the superstitions of children. These are classified under the captions of salt, bread and butter, tea and coffee, plants and fruits, fire, lightning, rainbow, moon, stars, babies, birds, especially owls, peacocks and chickens, cats, dogs, cows, sheep, swine, horses, rabbits, rats, frogs, toads, fish, crickets, spiders, snakes, lizards, turtles, other animals and insects, chairs, tables, clocks, mirrors, spoons, knives and forks, pointed instruments, especially pins and hat pins, combs, umbrellas, candles, matches, brooms, sweeping, dish rags and handkerchiefs, garden tools, ladders, horseshoes, hay, days of the week, New Year's, Ground hog day, April fool day, May day, Easter, Halloween, Christmas, birthday, numbers, counting and numbers, laughing, singing, crying, starting on a journey and turning back, speaking at the same time, in at one door out at another, washing and wiping together, walking on opposite sides of a post, stepping on cracks, sneezing, making a rhyme, boasting, crossing hands, sitting on a table, through a window, stumbling and falling, an itching palm, hand, eye, nose or lip, an ear itching, burning or ringing, foot itching, miscellaneous body signs, warts, mole, birth mark, sty, right and left foot, dress and clothing in general, neck, charms, strings and ribbons, shoes, precious stones, amulets and charms, wearing clothing wrong side out, rings, money, wishing, first time, wish-bones, death and funerals, dreams, spiritisms, weddings, initials. These very outlines suggest the richness and rankness of the superstitions considered and

are well calculated to raise the question in the mind of any reader whether education or civilization has any tendency to reduce superstitions. It would perhaps be difficult to find among any single savage race such an immense array of outgrown beliefs. The value of this study seems to us to rank very high indeed.

Public Document, No. 2. Seventieth Annual Report of the Board of Education together with the Seventieth Report of the Secretary of the Board, 1905-06. Wright & Potter Printing Company, State Printers, Boston, 1907. pp. 360 + 226.

We have read the seventieth report of the Secretary of the Board only to learn that nothing of much importance has occurred. There are allusions to the old days of Horace Mann which show that his soul, if not still marching on, is still in evidence. We are told that "though teaching is not all good, much of it is excellent," that Massachusetts is the only State where high school opportunities are offered to the young people of every town, and where all teachers are under professional supervision. The old is contrasted with the new. We are told that teachers are now beginning to look at children and to realize that they are not alike and to make training flexible and adaptive, that a most significant phase, viz., "self-realization has been introduced into educational discussion." This phrase is older than Froebel. Data are given about salaries, increase, registration, medical inspection, institutes, high school reimbursements, etc. We cannot see how it can pay any progressive educator to read this report while those of some of the agents are better. Some of the appendices are better yet, but the report, as a whole, is an essentially clerical affair. If the title of secretary of the board is ever changed, as long as it remains of this quality, it should be to clerk, not superintendent.

Ninth Annual Report of the City Superintendents of Schools for the Year Ending July 31, 1907. Department of Education, City of New York, 1908. pp. 663.

This ponderous report is noticeable among other things for the pages which Superintendent Maxwell devotes to the claim made by the New York teachers for equal pay for equal work. With a curious affectation of fundamentals the superintendent goes back to Herbert Spencer's Sociology for a few general statements of the differences between men and women, ignoring the fact that since Spencer wrote this topic has become one of burning interest, and that great progress has been made in its study, which would furnish him with far better references if he but knew them. After laying down other important principles and stating that schools must pay higher salaries if they are to obtain the best available teachers, although there is no prospect of this, he recommends that as soon as money is available the initial salary of women teachers in New York be raised from $600 to $720 per annum. He also thinks that the women principals should receive the same pay as men principals, as soon as money is available, "because it is quite as difficult to obtain women principals of the requisite scholastic and professional attainments and executive ability as it is to obtain men principals."

Linguistic Development and Education, by M. V. O'Shea. The Macmillan Company, New York, 1907. pp. 347.

This is distinctly the author's best book. He has attempted to summarize what has been done by various authors on the linguistic development of children from the first cry to learning a foreign language. The chapter on pre-linguistic expression is brief but sufficient

for practical purposes. The same may be said of those upon the early reactions to conventional language and parts of speech in early linguistic activity. The later chapters are: inflection, agreement and word order, development of meaning for verbal symbols, acquisition of word ideas in graphic and oral reading, the development of meaning, of oral efficiency, of composition and of acquiring a foreign tongue. The author appears to have made diligent use of the English literature upon the subject but has singularly neglected the recent foreign studies in his field; even those named in his comprehensive bibliography do not seem to have been utilized in the text. The most conspicuous shortcoming, perhaps, is that Wundt's comprehensive volumes are not even mentioned, although they abound in discussions of precisely the principles which the author discusses.

Report of the Commissioner of Education for the Year Ending June 30, 1905. Volume 2. Government Printing Office, Washington, 1907. pp. 1400.

We observe with great interest that the new secretary is attempting to catch up with Father Time and bring his report to date. This ends June 30, 1905, and there is at least another year or year and a half to be gained. The reduction of the appropriation has compelled the Bureau to also reduce the size of its annual report to about one-half. This causes cutting out much of the more or less extraneous matter. In this, nevertheless, there are interesting monographs on the Mosely Commission, on education in France, on the education of business men in the United States and in Germany, and an account is given of the international congress for the reproduction of manuscripts held in August, 1905, two months after the report closed. Attention is given to education in Alaska, Porto Rico, the Philippines, and a number of interesting matters are described in Chapter II, which is devoted to current topics.

Report of the Commissioner of Education for the Year Ending June 30, 1906. Volume I. Government Printing Office, Washington, 1907. pp, 643.

We are glad to receive the first volume of the Report of the Commissioner of Education for 1906, showing that the Bureau really intends to catch up. The present volume contains reports on education in Great Britain and France; the new Prussian school law; progress in Italy; foreign universities; public education in India, the Philippines and Cuba; the training of nurses; education in Alaska; educational periodicals; directory; statistics of State school system; universities, colleges, technical, professional, agricultural and mechanical schools.

State of New York Third Annual Report of the Education Department. For the year ending July 31, 1906. Transmitted to the Legislature January 25, 1907. Albany Education Department, Albany, 1907. pp. 694.

Every reader of this report will thank the educational department for the very interesting graphic charts it contains, enabling one to see at a glance the actual status and the history of the more important material aspects of education of all grades. Color devices show how expenditure is distributed, how salaries of men, women, town, city and state are apportioned, and how they have been in the past, and the growth of value of buildings, enrollments of teachers, the grades of license, students in training schools, certificates issued, enrollment and number of graduates of normal schools, the work of Arbor Day, financial and architectural aspects, the progress of high schools, the

apportionment of academic and library foundations, salaries of assistants, etc.

Addresses and Proceedings of the National Education Association, Los Angeles, Cal. Published by the Association, Winona, Minn., 1907. pp. 1102.

The 45th annual convention of the N. E. A., held at Los Angeles, July 8-12, 1907, has just published its report in a volume of 1102 pages. The general sessions are occupied by very general topics such as the relations of the school to the peace movement, democracy, the Indians, Mexico, economic relations, defectives, libraries, woman's organizations. A larger and larger portion of the real work of the institution is done in the sections which are growing in number and, on the whole, in interest. There is a most wholesome tendency in some departments to favor papers that really make contributions to educational knowledge, but it must be confessed that a great many of the papers are made up to a great extent of well meaning platitudes. Certainly every one engaged in teaching can find here valuable hints, directions and suggestions, and probably there is no publication anywhere near so representative of the actual intelligence of American teachers as this volume and the meetings which it reports.

Index by Authors, Titles and Subjects of the Publications of the National Education Association for its First Fifty Years, 1857-1906. Compiled by Martha Furber Nelson. Published by the Association, Winona, Minn., 1907. pp. 211.

This is a work of great value in itself and at least doubles the value of the Proceedings of the N. E. A. as a whole. Both topics and authors are put in one index. The most superficial glance reveals the immense volume of matter and the scope of topics treated in these fifty years and was a fitting memorial. While the great majority of these papers are more or less ephemeral, there are a few excellent things that will be of interest for many years. Some of the important addresses of Horace Mann were contained in the early records. Fortunately, no break is made in the record when the association changed its name in 1871.

National Education Association Fiftieth Anniversary Volume, 1857-06. Published by the Association, Winona, Minn. pp. 949.

Agricultural Education, including Nature Study and School Gardens, by JAMES RALPH JEWELL. Washington Government Printing Office, 1907. Department of the Interior, Bureau of Education, Bulletin No. 2, 1907. pp. 368.

The author prepared this valuable memoir as a thesis for the Doctor's degree in Clark University. He has made some minor revisions of it at the suggestion of the head of the Bureau of Education, so that now, as it stands, it is the best and latest world survey of the whole topic. The writer divides his material according to grades. (1) nature study, (2) school gardens, (3) agricultural colleges with a concluding section on the practical advantages of agricultural education. Under each of these heads the author has made a very wide international study and describes in succinct form the work done in nearly all the countries of the world for each of his grades. It is really a model monograph of the kind that attempts to sum up the present situation.

The Continuation School in the United States, by ARTHUR J. JONES. Washington Government Printing Office, 1907. Department of

the Interior Bureau of Education, Bulletin No. 1, 1907. Whole No. 367. pp. 157.

After treating statistics of school attendance and withdrawal and the agencies for supplementary education in other countries, the writer takes up the different types of continuation school, evening, of which he makes seven classes, Y. M. C. A., correspondence, special schools, schools for apprentices and employees. Another chapter is devoted to the kind and amount of instruction given in the continuation schools and their place and purpose, while a good digest concludes his work.

Progress of Education in Italy, by WILL S. MONROE. Advance sheets of the Report of the Commissioner of Education for 1906. Chapter IV, Government Printing Office, Washington, 1907. pp. 73-90.

Starting from the Milan International Exposition in 1906, the author traces recent progress in the kindergarten, elementary school, normal school, secondary education, university, training of defectives, etc., and concludes with a brief account of the congress itself.

The Auxiliary Schools of Germany, by B. MAENNAL. Six lectures, translated by Fletcher Bascom Dresslar. Department of Interior, Bureau of Education, Bulletin No. 3, 1907. Whole No. 376. Government Printing Office, Washington, 1907. pp. 137.

The writer first gives a historical sketch of the beginnings at Halle of auxiliary schools for feebly endowed children and the spread of the movement. The reasons for establishing such institutions are set forth in a brief but urgent way. Then follow chapters upon the admission procedure, the parents, and the whole environment of these subnormal children, health conditions, characterization, building, daily programme, curriculum, methods of teaching and discipline, preparations for confirmation, teachers, trainers and the principal and their pedagogic significance.

Suggestion in Education, by M. W. KEATINGE. Adam and Charles Black, London, 1907. pp. 202.

The writer discusses hypnotic suggestion, suggestion in the waking state, its experimental study, the process itself, its relations to imitation, to character, method, etc., meets the objection that education ought to be creative, gives a number of practical applications and the sanctions. The main idea of the book seems to be that besides the positive teaching which is followed up by an examination, there should be plenty of hints and intimations which are left for the mind to work on spontaneously, if not unconsciously. This view is wrought out in rather tedious detail and apparently with not very full knowledge of the best literature upon the subject. A whole chapter is devoted to Binet's Suggestibility printed in 1900. The book is interesting and suggestive, but it seems to the present reviewer disappointing when we consider what might have been done in this field.

Early Withdrawal from School. Address delivered before the Philadelphia Teachers' Association. Part I, The Responsibility of the Home, by PATTERSON DUBOIS. Philadelphia, 1908. pp. 16.

The writer collects a very suggestive report of the pupils above fourteen who left the Philadelphia public schools during February and March, 1907. In the elementary schools there were 1,059 between fourteen and fifteen who left; 274 from fifteen to sixteen, etc. The chief cause was to go to work, but a very close second was lack of interest. Ill health and other causes were very much less. In the high schools, 247 withdrew during these two months and here ill health

led with 71 cases and the necessity of going to work and lack of interest came later.

The Elimination of Pupils from the School, by EDWARD L. THORNDIKE. Department of the Interior, Bureau of Education, Bulletin No. 4, 1907. Whole No. 379. Government Printing Office, Washington, 1908. pp. 63.

This is a very careful statistical study and shows that at least one-fourth of all white children who enter school stay only just long enough to read simple English, write the most common words and perform the four operations for integers without serious error. One-fifth of these children entering city schools stay only till the fifth grade. Over one-half have never had a man teacher. Less than one-tenth who enter graduate from the high school. Only one-third graduate from the elementary school of seven grades or more. Only about one-half have any teaching of any consequence concerning the history of their own country. In our city high schools for 100 girls entering, there are 75 boys, but in the last year there are 60 per cent. more girls than boys. Compared with other countries, we succeed, nevertheless, well in retaining children in school. There is an enormous variability among cities in the amount of elimination. At least it is over 40 per cent. One main cause of elimination is lack of interest in the work demanded by the present course of study.

The Writing of English, by P. J. HARTOG. With the assistance of Mrs. Amy H. Landgon. The Clarendon Press, Oxford, 1907. pp. 164.

This book may be summed up as follows: The English boy cannot write and is not taught to write English. The French boy can write French because he is taught how to write; the historical reason for the foregoing facts: how the French boy is, and how the English boy may be, taught to write. The incapacity of the English boy the author designates as "scandalous." He does not believe English children lack capacity for writing their English, nor does he hold that the French method should be transferred bodily with no modifications. It should be also said that he writes from personal knowledge of French as well as of English schools. The first chapter sketches the history of teaching the mother tongue in France; the second the methods of teaching French composition; the third discusses the writing of English; and the fifth literary training and superficiality. He believes examination papers as now demanded impair English. The author, with assistance, has certainly written a sprightly work, and the appendix contains very many practical examples and suggestions.

The Economic History of the United States, by ERNEST LUDLOW BOGART. Longmans, Green & Co., New York, 1907. pp. 522.

The writer does not attempt to rehearse the events common to political and constitutional histories of this country, but rather to emphasize the points neglected by them. The keynote of our history, from whatever standpoint written, is the effort of a virile people to develop the natural resources of a new continent and there to realize their ideals. Our economic history is the history of the achievement of a people working under free competition, untrammelled by custom, tradition or political limitations, and whose changing condition of environment constantly compel new adaptations and promoted ingenuity and energy. The history of this economic struggle is no less interesting than the political history, which latter cannot be understood without it. Before the beginning of the last century, the strug-

gle for commercial and economic independence was well on and then came industrial evolution and the westward movement, and, finally, from 1880 to the present time, economic integration and industrial organization. The book comes down to the present time and is illustrated by several scores of cuts and by 26 maps. On the whole, it is a valuable addition to the educational texts.

The Fonetic Primer, Offering the Universal Alfabet and the Science of Spelling. By CHARLES A. STOREY. Isaac H. Blanchard Co., New York, 1907. pp. 60.

This book shows an immense amount of study and is designed to be a kind of spelling dictionary. It is based on 5,500 words of one syllable. It professes to contain the universal alphabet and the rules and principles of the science of spelling, and is presented to the world as a substitute for all others, so that there should eventually be but one alphabet and one method of spelling. Not only does it contain all necessary rules for spelling, but they are as exact as those of arithmetic. The above 5,500 words are all there are in the English language of one syllable and the old spelling is given beside them. These words are divided into sixteen classes, under which all these words are grouped. The principle of division is first, all those words that consist of a single vowel; then all those with a vowel preceded by a consonant; then those with a vowel following; then those with both a preceding and a succeeding consonant; the same order for two consonants before, after, and both before and after and either before or after; and finally the same with three. It is certainly a very suggestive and interesting work quite apart from the more questionable postulate of phonetic spelling.

Einleitung in der akademische Pädagogik, von HANS SCHMIDKUNZ. Buchhandlung des Waisenhauses, Halle a. S., 1907. pp. 206.

This volume is somewhat unique and looks like a thesis. Had it fulfilled all that its title suggests, it would indeed have met a long felt want and the author certainly deserves credit for his efforts, but his method is largely that of indirection. He devotes first a section to rather abstract talk about pedagogy in general, its ideas, the relations of theory and practice, the constants and variables, and then treats the relation of academic to other pedagogy and has something to say of industrial education. In the third section he characterizes the university and other institutions of its rank, discusses academic freedom, personal devotion to work, and only when the first third of the volume is done and he speaks briefly of personal specialization is there anything that honestly seems to fit the title. In the next section he criticises in a very abstract way the value of tradition, its influence, its methods, its abuses. Pre-and post-academic pedagogy are distinguished, and we are given some very platitudinous remarks about the necessity of proceeding from the easy to the hard, the simple to the complex, the near to the far. Later we are told something of the value of the lecture method, of practice, of study at home, of the value of encyclopædic work and of hodegetics. A very arid section on the sciences most closely related to pedagogy follows, especially philosophy and psychology and, in the final chapter, we are given many Herbartian commonplaces concerning former steps, repetition, etc.

The Organized Theatre, by ALLEN DAVENPORT. Miscellaneous pamphlet series, No. 2, November, 1907. Boston. pp. 16.

The writer here sketches a plan by which a theatre might be the property of university by investment, endowment and legacy. Each

theatre might be conducted under its own rules and presided over by a learned body of directors selected by university trustees who should have all authority in matters of appointment, arbitration, dismissal, etc., contingent on the offices of playwright, manager and actor, who are not to be interfered with except for misdemeanor. The musicians, artists, electricians and all the auxiliary corps are also to be exactly organized. This scheme is worked out with some detail with reference to the history of the theatre, and its purpose is to elevate it and enhance its normal educative influence.

The Psychology and Pedagogy of Reading, with a Review of the History of Reading and Writing and of Methods, Texts and Hygiene in Reading. By EDMUND BURKE HUEY. The Macmillan Company, New York, 1908. pp. 469.

This book is to a great extent an expansion of a thesis for the Doctor's Degree at Clark University. The author has gone into the subject very thoroughly, and not only from the experimental standpoint, but from the pedagogical as well. It is in a sense a book that fills a want. The first part deals with the psychology of reading, including the work of the eye, the extent of matter perceived during a pause, experimental study upon visual perception, and the nature of its process in reading, the inner speech of reading and the mental and physical characteristics of speech, the functions of the inner speech in the perception of what is read, the interpretation of what is read, and the nature of meaning and the rate of reading. Part second gives the history of reading and of reading methods, the beginnings and interpretations of gestures and pictures, the evolution of the alphabet, of the printed page, and the history of reading methods and texts. The third part treats of the pedagogy of reading, present day methods and texts or primers, the views of educators, learning to read at home and in school, reading as a discipline and as training in the effective use of books, what children and adolescents should read. The last part deals with the hygiene of reading, especially fatigue and hygienic requirements in printing books and papers. The author appends certain conclusions concerning the future of reading and printing and the elimination of waste. On the whole, no one who has followed the literature on this subject can doubt that we have here the best and most comprehensive text yet written in any language to give a general view of the subject.

The Making of a Teacher, a contribution to some phases of the problem of religious education. By MARTIN C. BRUMBAUGH. The Sunday School Times Company, Philadelphia, 1905. pp. 351.

Among the subjects of the twenty-eight chapters are how knowledge reaches the soul, how education is secured, facts about memory, feeling, imagination, ideals, symbols, judgment, different kinds of knowledge, the laws of teaching, how to train up a child, soul activity through words and questions, the course of study, recitation, Jesus the ideal teacher, His educational principles and methods, the scope of religious education, etc. These chapters are not connected and seem for the most part to have been written for special purposes and occasions. There is almost no sign of scholarship or erudition in the book, that is, there are no titles, foot-notes or references, but these papers are confidentially addressed to teachers with a practical end in view.

Moral Training in the Public Schools. The California Prize Essays, by CHARLES EDWARD RUGH, T. P. STEVENSON, EDWIN DILLER STARBUCK, FRANK CRAMER, GEORGE E. MYERS. Ginn & Co., Boston, 1907, pp. 203.

A Californian, who withholds his name, lately offered a prize of $500 for the best essay on moral training in the public schools, and a second prize of $300 for the next best essay, and named a committee to make the award. They assigned the first prize to a California principal and the second to a Philadelphia clergyman. The essays which stood next in rank were those of Professor Starbuck, of the University of Iowa, of Frank Cramer, of California, and Principal George E. Myers, of Washington, who presented his Doctor's thesis at Clark University. These are all printed in this volume, and although there is much repetition, the book as a whole is a valuable contribution to the subject now coming to occupy the attention of American educators as never before.

Education by Plays and Games, by GEORGE ELLSWORTH JOHNSON. Ginn & Company, Boston, 1907. pp. 234.

This work is dedicated to Dr. G. Stanley Hall, who writes a brief introduction. It is a revision and a great enlargement of a work begun at Clark University and published in the *Pedagogical Seminary* in 1894. Since then the writer has been in intimate and almost constant touch with children, and he has won a wide and well merited reputation for the successful educational new departures he has made. There are two parts; one on the theory, history and place of play in education, which discusses its meaning, the periods of childhood and their relations to a course of plays and games, while part second contains a suggestive course of plays and games divided into five periods, viz., from birth to three years of age, from four to six, from seven to nine, from ten to twelve and from thirteen to fifteen. A classified bibliography upon the subject adds materially to the value of the book. There are illustrations on nearly every page, most of which are new. Altogether the book is unique in educational literature and may be called a *vade mecum* for every teacher who is interested in any phase of this subject.

Specimens of Prose Composition. Edited with introduction and notes by Charles Read Nutter, Frank Wilson Cheney Hersey and Chester Noyes Greenough. Ginn & Co., Boston, 1907. pp. 478.

The editors compiled these specimens because they did not find exactly what they wanted anywhere else, and they have tested them by use in their owu class rooms. Its features are that it illustrates all kinds of writing in one volume, includes good compositions by students themselves, makes a classification more explicit and suggestive than elsewhere exists, and shows that the principles of composition must not be applied inflexibly to all kinds of writing, but undergo great modifications. The selections are short so that analysis of entire sections can be made in a single recitation. The chief topics are exposition, with a dozen models, then biographical accounts and portraits; models of criticism; of argument; description of landscapes; exteriors and interiors; technical elements, like dominant tone; point of view; color, sound; order; elements in combination and finally, narration of facts, history, incidents, adventure, fiction, etc. At the end of each section are printed a few students' themes, illustrative, we fancy, of the beneficent effects of this method of teaching.

A Syllabus for the History of Western Europe with references and review questions. (Based on Robinson's "Introduction to the History of Western Europe.) By NORMAN MACLAREN TRENHOLME. Ginn & Company, Boston, 1907. Part I. The Middle Ages, pp. 80. Part II. The Modern Age, pp. 94.

This syllabus represents a discussion method. The students are

responsible for the prescribed work in the text and also for at least one selection from a collateral reference given in the syllabus. Here the topics are outlined with references. This scheme seems to us as excellent as it is new.

Lessons in Practical Hygiene, for use in schools, by ALICE RAVENHILL. With preface by Professor M. E. Sadler. E. J. Arnold & Son, Leeds and Glasgow, 1807. pp. 744.

The first part is introductory and describes life in general and the characteristics of air and water; the second is devoted to the human body, the nerves, osseous, muscular and nervous system, the senses, etc.; the third discusses food, its preparation; the fourth, personal hygiene; and the fifth, the dwelling.

Graded City Arithmetic. Beginners number primer, one to twenty. Book I in eight book series. The Macmillan Company, New York, 1907. pp. 78.

This is the first of a series of eight graded city arithmetics designed to present in the briefest form everything in elementary school mathematics. This minimum is taught by the most approved devices and arranged with reference to the needs and interests of the children first, and secondly according to logical principles. The problems are useful. In this first volume everything is concrete and there are plenty of illustrations of many kinds, and if there is any criticism, it is perhaps that the illustrations are somewhat too copious. Great use is made of pegs, dots, squares, etc., and there are abundant things to count.

A Primer, by CATHARINE T. BRYCE and FRANK E. SPAULDING. With illustrations by Margaret Ely Webb. (The Aldine Readers.) Newson & Company, New York, 1907. pp. 141.

The features of this primer are that the subject matter is within the range of the experience and fancy of children at five and six. It is full of action and dramatization. As to vocabulary, less than one hundred entirely different words are used, but each is repeated many times. The rhymes, of which there are over a dozen, are designed to be thoroughly memorized and contain nearly all the words in the book. The pictures are colored, though each one has but one color with different shadings.

A First Reader, by FRANK E. SPAULDING. With illustrations by Margaret Ely Webb. (The Aldine Readers.) Newson & Company, New York, 1906. pp. 135.

The first reader also aims to present live matter and to teach to read independently. Its material is grouped under captions: out-of-doors; in summer time; with flowers and stars; Christmas; garden and meadow. The same system of copious and tinted illustrations is used. There are many of them and in the vocabulary each new word is listed where it first appears.

Learning to Read, a Manual for Teachers. By FRANK E. SPAULDING and CATHERINE T. BRYCE. With illustrations by Margaret Ely Webb. Newson & Company, New York, 1907. pp. 141.

In the teachers' manual Dr. Spaulding explains the method and use of books and charts and other material, amplifies his principles of rhythm and presents a comprehensive phonic chart.

American History, for Use in Secondary Schools. By ROSCOE LEWIS ASHLEY. The MacMillan Company, New York, 1907. pp. 557 + 47.

This is the work of an experienced teacher and makes a very attractive appearance. It comes down almost to the present time, containing accounts of the St. Louis Exposition in 1904. Few teachers have so clearly seen the importance of making a vital contact with the present.

Gage's Principles of Physics. Revised by Arthur W. Goodspeed. Ginn & Co., Boston, 1907. pp. 547.

This is a revision of a book published first in 1895, since which time physics has made rapid strides. Parts have, therefore, had to be rewritten with new sections, and all is made to correspond to modern requirements for admission to college. There are few formulæ but 402 cuts.

A School for Mothers, by Evelyn B. Bunting, Dora E. L. Bunting, Annie E. Barnes and Blanche Gardiner. Horace Marshall & Son, London, 1907. pp. 86.

In connection with St. Pancras and suggested, perhaps, by a very effective organization at Ghent, Belgium, a volunteer body of ladies and gentlemen have given stated instruction to those who are and are about to become mothers, where all are welcome. Later a restaurant, after the fashion of that of Madame Coullet in Paris, with kitchens, was established, and there are not only lectures given on nursing to nursing mothers, but dietaries, cook books, examinations, with various representative menus and dinners free or at cost with plenty of infant consultations. Moreover, a Provident Maternity Club has been established where lessons for mothers are given every Wednesday, and there are detailed syllabi for all they need to know. This work has developed remarkably since it was opened in June, 1907, and has had already, as the school in Ghent, a very marked effect in reducing the death rate.

Les Enfants anormaux, guide pour l'admission des enfants anormaux dans les classes de perfectionnement. Par Alfred Binet and Th. Sumin. Armand Colin, Paris, 1905. pp. 211.

These writers first discuss the chief psychological traits of abnormal children, their distribution by age, mixed and unstable types, those due to retardation and to instability. They then pass to the pedagogic examination of abnormals and of schools; tell how conferences should be best conducted with parents; what should be the composition of a jury of inquiry; the rôle of instructors, of interpreters, controllers, judges; the method of training; the kind of physical and psychic examination to which such children should be subjected and the value of various tests. The medical examination should include cephalometry, the stigma of degeneration, and all signs of debility, arrest and perversion. In the final chapter present conditions and methods in use at Saltpetriere and Bicêtre are described.

Die Entwicklung des Interesses des Kindes, von Ladislaus Nagy. Zeitschrift fur experimentalle Padagogik. V. Band, Heft 3/4. Otto Nemnich, Leipzig. pp. 198-218.

The writer first gives a rather comprehensive review of the chief results of previous studies on interest; attempts to grade them as sensuous, subjective, objective, permanent and active; and then draws therefrom pedagogic inferences as to how each stage from the sensuous to the logical should be treated.

What are you doing? Why are you doing it? Why do you do it like that? By Frank E. Spaulding. Printed with additions and

questions. Fanning Printing Co., Newton Upper Falls, Mass., 1907. pp. 46.

This is a superintendent's heart to heart talk with his teachers, masters, and supervisors on marking, formulæ, topical analyses, school machinery, and mass versus individual work, keeping children together, promotions, ideas versus practice, true place of system, bases of agricultural progress, compulsion, the waste of time and effort, how to attack the spelling problem, the value of the child's time, etc. At the close, suggestive questions for recapitulation of the contents of the book cover some pages.

The Book of the Child: an attempt to set down what is in the mind of children. By FREDERICK DOUGLAS HOW. Pitman & Sons, Bath, 1907. pp. 189.

The author's preface begins, "I am rather shy about this little book," and he adds that were it not for some kind friends it would never have seen the light. It is all, as the title indicates, concerning the child, its arrival, memory, imagination, religion, imitation, pleasures, pathos, with final chapters on wayside children and children's meetings. It is wholesome and rather attractive, but contains very little new material.

The Higher Education of the Young; its social, domestic and religious aspects. By S. H. SADLER. 2nd ed. George Routledge & Sons, London, 1907. pp. 276.

The writer here republishes an original little brochure which was out of print twenty years ago, which he has revised. It has no chapter headings but has a few quaint illustrations, many quotations, is especially poetic and shows a great deal of reading of the historical literature of education.

Die soziale Hygiene, ihre Methoden, Aufgaben und Ziele. Von ADOLF GOTTSTEIN. Zeitschrift für soziale Medizin. 2 Band, 1 & 2 Heft. F. C. W. Vogel, Leipzig, 1907. pp. 72.

The author first discusses the bases of his subject; then methods and statistics, official, medical and applied; anthropometry; further methods of equipment in this department; epidemiology; industrial hygiene and further problems.

Scholasticism Old and New: an introduction to scholastic philosophy, medieval and modern. By M. DE WULF. Translated by P. Coffey. Benziger Bros., New York, 1907. pp. 327.

This book is the outgrowth of a pamphlet published in 1899 upon the subject, and it contains very many of the doctrines which form the subject matter of teaching and publication in Catholic colleges. The object of the work, we are told, is to meet and combat false conceptions, and to co-ordinate all notions so as to furnish the reader with some general information on the new scholasticism. The author has merely traced outlines, raised and stated problems without claiming to have noticed all the points of view the subject matter admits of. It is designed as an invitation to the reader to undertake a deeper and more personal study of modern scholastic philosophy, which is a very different thing in some respects from that of the schoolmen. The author has sought to compare, point by point, the individuals of the past with those of the present. The old scholasticism is most extensive, but the new most perfected in its details. The first part, therefore, after an introduction and definition of the term, of the schools of which it was the daughter and of scholastic methods, proceeds to show its relations with theology, mediæval science and the problem of

universal ideas. A long chapter is devoted to doctrinal definitions as, for instance, of metaphysics, theodicy, psychology, moral philosophy and logic, while a third chapter traces in outline the decline of scholasticism. The second part, devoted to modern scholasticism, takes up the same topics, namely, metaphysics, theodicy, psychology, general psychology, æsthetics, ethics, logic and other branches and compares the new with the old view-point. The fact of the new scholasticism and the conclusion of the matter may show that both Kant and positivism are wrong. In an appendix, the plan of philosophic instruction at Louvain and the influence of that school, its text-books and publications, are given.

The National Council of Congregational Churches of the United States. Addresses, reports, statements of benevolent societies, etc., of the thirteenth triennial session at Cleveland, Ohio, October 8-17, 1907. Published by order of the National Council, Fort Hill Press, Boston, 1907. pp. 1446.

This meeting listened to sixteen different addresses by various people, including the relation of the church to public education, theological seminaries, the modern minister — his method and his training, the church and industrial problems, the church as a champion of social justice, as a witness to civic righteousness, church neglect, Christian endeavor and Evangelism, church and the social crisis.

The Inward Light, by H. FIELDING HALL. The Macmillan Company, New York, 1908. pp. 228.

This volume is saturated with the wisdom of the East, which is set forth in an intuitive way by a writer who knows Buddhism from a long residence in the Burma, and whose great work, "The Soul of a People," constitutes the best recommendation of Buddhism to the West that it has ever had. Among the titles of the 22 chapters are: the secret of the East; truth and its image; the evolution of the soul; one time, one truth; David, fate and free will; the way; the great gift of charity; man's faith and woman's; the perfect fellowship; the understanding dream, and, finally, all truth is one. These, however, give but little indication of the real content of the book, which, indeed, is impossible to describe. It has much, though not all, of the charm of his first great work. It abounds in apologues and incidents that are charged with higher meanings, parables, etc. Indeed it is almost a devotional work. No one could read it through at a sitting, and the chapters are of very uneven merit. There is almost a narrative running through it, but there is a kind of mysticism that pervades it, almost suggesting Maeterlinck in some places. The fascination of the author with his theme is itself an inspiration, and although he seems to be growing more and more a mystic, it must be that the charm of both his style and his sentiments will do much to carry along with him very many who are not used to this type of thought.

Delecta Biblica. Compiled from the Vulgate edition of the Old Testament and arranged for the use of beginners in Latin. By a SISTER OF NOTRE DAME. Longmans, Green & Co., New York, 1907. pp. 79.

This is a unique and interesting book for the Protestant reader. It is designed as an introduction to Latin and fifty-six stories are condensed from the creation of our first parents to Belshazzar's feast. The study is essentially grammatical, and in the first lessons illustrations are given of the kind of questions to be used and the answers to be expected. Everything, however, from the very outset must be in Latin.

The Way of God in Marriage. A series of essays upon Gospel and scientific purity. By MRS. MARY E. TEATS. Physical Culture Publishing Company, New Jersey, 1906. pp. 307.

This book, dedicated to the author's daughters and to young people in general, treats of the Bible aspect of the sex question, Christian and Gospel ethics, science of life, marriage, duties and privileges, requisites for true parenthood, prenatal culture, rights of the unborn, our national sin, race suicide, the day star is dawning, the old home of the old century, the new home of the new century, hopeful signs, the rainbow of promise.

Die litterarische Charakter der neutestamentlichen Schriften, von C. F. GEORG HEINRICI. Dürr, Leipzig, 1908. pp. 127.

The writer's standpoint is that of his earlier work on the primitive Christian transmission and the New Testament. After a history of the problem, he takes up Judaism, the original conditions of New Testament authorship, its forms and its means of expression, such as style, comparison, deification, confession, liturgics, imagery, personification, etc.

Buddhist and Christian Gospels; now first compared from the originals. By ALBERT J. EDMUNDS. 4th ed. Innes & Sons, Philadelphia, 1908. pp. 162.

These parallels begin with infant legends, then pass to initiation, to ethics, including some sixty different points, then the eschatology or the closing scenes of Jesus' life are compared with those of the East, and, finally, thirteen uncanonical parallels are appended.

A Modern Utopia, by H. G. WELLS. Charles Scribner's Sons, New York, 1907. pp. 393.

The author describes a sudden transportation of himself and a nameless botanist to another planet very similar to this, speaks of the momentum of customs and their observance and discusses freedom, Utopian economics, the voice of nature, failure of women in a modern Utopia, other impressions, my Utopian self, the Samurai race in Utopia, etc. There are seven vivid mystic illustrations. The author has saturated his mind with most socialistic writings from Plato down to Morris's "News from Nowhere," and soliloquizes, often for pages, in an aimless and really unintelligible way and then suddenly says very striking and original things. For instance, he proposes that the State should endow all women fit to be good mothers, examine them and pay them for every healthful child so that if they have six or eight they should be relatively rich and independent of their husbands. He would have not only women who desire but also men come into this arrangement; would prevent the enormous death rate of young children symbolized by a cut of a row of mothers mourning over little graves; would prevent the marriage of noble women with wealthy fools, symbolized by a cut of a wedding scene of a lady leading a cloven footed ass to the altar; would not allow women to be burdens upon men, symbolized by a toiler carrying a much bedizened and bejeweled woman upon his back, and postulates a new order of individuality of those who live according to the highest principles of honor, and wish above all things to transmit life effectively to generations to come. Why must so brilliant a mind indulge in such fantastic grimaces of literary expression? If the thought in his book were presented clearly and succinctly in fifty or a hundred pages it would surely be read by very many who cannot afford the time to gather its scattered thoughts as they are at present dispersed through his pages, or who are repelled from the content by the form.

Through Widest Africa, by A. Henry Savage Landor. Charles Scribner's Sons, New York, 1907. 2 vols.

During twelve months this explorer penetrated Africa from the east, traversing its longest diameter about ten degrees north latitude with a small party from Djibuti to Cape Verde. He enriches his volumes with 160 half-tone reproductions of photographs, and dedicates his work to King Victor Emmanuel of Italy. The work is full of interesting points of view, some of them new. For a long distance the excursion skirted the boundaries between the French and Belgian Congo Region, and it is significant to note that this traveller was everywhere impressed with the superior humanity and effective organization of the Belgian as compared with the French administration. He declares that the rubber tax of the Belgians was not exceessive, and that the natives were treated with more humanity by them than by the French.

Enquête scientifique sur les végétariens de Bruxelles: leur résistance à la fatigue étudiée á l'ergographe la durée de leurs réactions nerveuses considérations énergétiques et sociales, par Mlle. J. Iotevo & Mlle. Varia Kipiana. Henri Lamertin, Bruxelles, 1907. pp. 77.

These writers have studied the resistance to fatigue as measured on the ergograph and as affected by vegetarian diet. They find that a vegetable diet very greatly defers fatigue and that the decline is indefinitely prolonged as compared with curves constructed by flesh eaters. They, therefore, advocate more attention to be paid in cooking schools to the preparation of vegetable foods, that vegetarian restaurants be established, and societies to propagate this doctrine, and that all these be done in the interest of both public and private health and efficiency.

Der Exprimentator, von Erich Lehnfeld. A. Hartleben, Leipzig, no date. pp. 368.

This is a very interesting and somewhat novel boy's book. It has over 350 illustrations and touches nearly all the sciences. Its principal idea is that it is designed to teach boys to do things.

Principes de linguistique psychologique: essai de synthèse. Par Jac van Ginneken. Otto Harrassowitz, Leipzig, 1907. pp. 552.

The first book is devoted to representations of words and of things; the second to intelligence and its adhesion or assent and the grammatical categories; the third to the sentiment of appreciation including that of connection and quallification of intensity, etc. The last book considers will and automatism, their fundamental laws, their relations with each other, the general principles of historic phonetics, of dynamic semasiology and the general feeling of the order of words.

Principles of Breeding: a Treatise on Thremmatology. By E. Davenport. With an appendix by H. L. Rietz. Ginn & Co., Boston, 1907. pp. 727. (Country Life Education Series.)

This is a very comprehensive work that seems to be meant to be also exhaustive. The first part deals with variations; the second with its causes; the third with transmission and only when we reach the fourth do we have practical problems such as selection, systems of breeding for plants and animals, the determination of sex, etc. While the author has given an admirable compend of the theories of heredity, he has made little attempt to add essentially to them in this work.

The Fungus Growing Ants of North America, by WILLIAM MORTON WHEELER. Extracted from Bulletin of the American Museum of Natural History Vol. XXIII, Article XXXI. pp. 669-807. New York, Sept. 30, 1907.

This work is devoted very largely to a description of the various species to most of which, however, is appended a succinct account of their habits. It is a comprehensive and invaluable work by the man in this country who perhaps has done most in this field.

Psychology of the Nervous System, by PAUL CARUS. An extract from his larger work "The Soul of Man." Open Court Publishing Company, Chicago, 1907. pp. 85-218.

This is a popular book, with very copious illustrations, compiled from various sources. The writer describes first the nervous system of worms, radiates and articulates; then the connecting link between vertebrates and invertebrates; then the development of the brain, spinal cord, medulla, cerebral hemispheres, cortex, concluding with a section on pure physiology of the brain.

An Introduction to the Mechanics of the Inner Ear, by MAX MEYER. The University of Missouri Studies. Science Series, ed. by W. G. Brown. Vol. II, No. 1. Published by the University of Missouri, December, 1907. pp. 139.

As a result of the careful study of the structure of the ear, the writer is able to draw certain inferences concerning the types of audition of various forms among the lower animals which cannot fail to be of the greatest interest to psychologists.

The Correction of Featural Imperfections, by CHARLES C. MILLER. Published by the author, Chicago, 1907. pp. 134.

This work treats of infiltration, the prevention of outstanding ears, of excessively large ones, involving some reconstruction of the ear; vibrous tumors, fold backs and wrinkles about the eyes; reduction of hump nose and tip tilted one, the bulbous type; how to treat stenosis of the nose; the excision of stars, tattooes or paraffin injections; the inversion of everted lips; macrocheila; eradication of the naso-labial line; of a hardness of mouth expression; improving appearance of the brow; curing double chin; outstanding nasal alae; how to form a dimple, etc.

American Communities and Co-operative Colonies, by WILLIAM ALFRED HINDS. 2nd rev. ed. Charles H. Kerr & Co., Chicago, 1908. pp. 608.

This story begins with the commencement of the early colonies at Jamestown and Plymouth and Moravian Settlements; then considers the Ephrata Community 175 years old, that of Snow Hill, of Jemima Wilkinson, the Shakers, the Harmonists, Zoarists, Owenites, the Perfectionists, Hopedales, Fourieristics, Brook Farm, North-American Phalanx, Fruitlands, Skaneateles, the Amana Community, those of Bethel-Aurora, the Icarians, Second Adventists, Nazians, Bruederhofists, Brotherhood of the New Life, the Woman's Commonwealth, Shalam, Topobolampo, Koreshans, Altruists, the Ruskinites, the Fairhope Association, the Roycrofters, the Straightedgers, the House of David, the Temple home, the Helicon home, fellowship farm associations, etc. This work is a second revision, but it is of the greatest value to all those interested in the subject.

The Raid on Prosperity, by JAMES ROSCOE DAY. D. Appleton & Co., New York, 1908. pp. 352.

The twenty chapters that constitute this book are certainly written in a very vigorous and confident way. The new age; the citizen; the rights of speech; reactionaries; stretched constitution; corporations and their rights; the standard oil in three chapters; exact justice; swollen fortunes; charitable trusts; tainted money; labor unions; working men; the remedy; men for the times: — are all discussed in a way which is calculated to leave the uninformed with no suspicion that there is another side than that presented by the author. He declares that he pronounced judgment on most of these topics twenty years ago, that he is oppressed by an increasing appreciation of our country's magnitude and by the immensity of our times, that he speaks by no man's favor, is restrained by no man's frown, tells us much of his own history in an incidental way, uses many quotations from old and standard authors. Although the writer of this note has dipped into the book quite extensively, he does not feel competent to pronounce a judgment upon many of the very complex problems here so confidently discussed.

John Bull, by CECIL REDDIE. Second edition. George Allen, London, 1901. pp. 76.

In this work Dr. Reddie undertakes to give the chief characteristics of John Bull, his present condition, that is, to summarize the constituent elements physical, æsthetic, moral, intellectual, in the British child and to find the growth momentum of each, what are his traits, ideals, how produced, what are their consequences. He discusses English society, foreigners' views of British characteristics, and as a result draws certain conclusions concerning the tertiary education needed.

Zur Psychologie der primitiven Kunst. Ein Vortrag von MAX VERWORN. Abdruck aus der Naturwissenschaftlichen Wochenschrift. VI. Bd., der ganzer. Reihe XXII, Bd. Nr. 44, 1907. Gustav Fischer, Jena, 1908. pp. 47.

The art of the old paleolithic cave drawings, some of which have been the wonder and admiration of the world, was characterized by the fact that these races were physio-plastic, that is, drew precisely what they saw and as they saw it. The later races that swept over Europe, the long heads from the Southeast who constituted the men of the neolithic age, had developed ideas, thoughts, fancies and images from which they drew, and are therefore designated as ideoplastic. When such mental products were sufficiently developed to be set forth in drawing they greatly interfered with the exact fidelity of copying objects before the eye so that art became far more fantastic and full of symbols, imaginary beings, etc. This line of art development was so old that every primitive race of man, save one perhaps, the Bushmen, have followed it and are ideo-plastic in their art, and every trace of the old physio-plastic habit has been eliminated even from children who draw human bodies and then draw clothes on them, who draw the wheels of a wagon, for instance, in different perspectives and give their fancy free rein. In this field people copy and this results first in degeneration as can be seen even in experiments with children who copy copies, while others copy theirs so that at half a dozen removes from the original great deterioration is shown, and this copying copies instead of first-hand work is naturally characteristic of ideo-plastic art, so that schools, norms and conventionalities arise.

The History of Music to the Death of Schubert, by JOHN K. PAINE. Ginn & Company, Boston, 1907. pp. 314.

This is a summary of the popular lectures which Professor Paine gave at Harvard for many years. The present volume contains so much of these notes as had received the author's final revision. The book is divided into two parts; first, ancient and mediæval music beginning with the Greeks and Romans; and the second treats the origin of dramatic music, opera and oratorio for different countries and with chapters on different composers ending with Schubert.

Stories of the Wagner Opera, by H. A. GUERBER. Dodd, Mead & Co., New York, 1907. pp. 191.

These eleven chapters constitute an admirable introduction to the myths which underlie Wagner's chief operas. They are told in a very simple and effective way with very little allusion to the music, but with brief statements concerning the composer and the circumstances under which he wrought out each of these operas.

Histoire des Jouets, by HENRY RENÉ D' ALLEMAGNE. Hachette & Cie, Paris, no date. pp. 316.

This is an elegant quarto very copiously illustrated with a score or two colored plates. The writer praises the simplicity of the toys of antiquity, holds that they have a very high educational value as restoring the influence they seem to have had in the Middle Ages upon religion and life, deprecates foreign made toys and those made of sugar or bread. The first chapter discusses toys of the earliest infancy and devotes special sections to the the rattle, windmill, suprise boxes, animals, vehicles, etc. Another chapter gives the history of dolls from the ancient Romans down and another of the most unique chapters is devoted to doll interiors, their houses, chambers, furniture, cradles, etc. Lead soldiers and military equipments, automatons, marionettes, shadowgraphs, magic lanterns, kaleidoscope, phantascope, magnetic and electric toys, balloons, parachute, each have special chapters and the author shows considerable interest in the scientific value of toys.

Les Jouets, par LEÓ CLARETIE. May et Motteroz, Paris, no date. pp. 324.

We have here an interesting and elegant volume with one or more illustrations on every page, some of them colored. The chief topics are on the toys of ancient France and great and little manufactures. Then the toy in prisons and in luxurious homes is discussed. One chapter is given to the toy shop; animate toys and wire toys are discussed and one of the most interesting chapters is given to the relation of the season of year and the toys. Toys play an important part in religion, in education, in science, letters, art, geography, history, life and finally after one interesting chapter on dolls, the work concludes with the philosophy of toys.

Études d'histoire et de psychologie du mysticisme des grands mystiques Chrétiens, par HENRI DELACROIX. Félix Alcan, Paris, 1908. pp. 470. (Bibliotheque de Philosophie Contemporane.)

The first chapter is devoted to St. Theresa and the inner life. Then follow others devoted to her development of mystic states, her words and her visions. In the third chapter, Madame Guyon is discussed and especially her apostolic state. Her mysticism is very carefully analyzed. The spiritual masters, St. Francis de Sales and John Delacroix are compared and the relations in which all have stood to the church. Then follows a characterization of Suso mystic experiences, systems and traditions and later comes a discussion of intellectual intuition, its passivity and its systematization are objects of special

inquiry. In an appendix, psychic hallucinations and sense of presence, inner words and fancies, intellectual visions and quietism are treated.

Greek Lives from Plutarch. Newly translated by C. E. BYLES. With illustrations and maps. Longmans, Green & Co., New York, 1907. pp. 232.

This is intended to be an English reading book in the schools. The standard translations of Plutarch are not very suitable to this use. Moreover there are very many rambling digressions which mar the directness of the narrative. The most interesting descriptions and anecdotes are retained. Each of the lives here given have, therefore, been much abridged. The translation here made is from Teubner's text and the lives used are that of Plutarch himself, then Theseus, Lycurgus, Aristides, Themistocles, Pericles, Alcibiades, Dion, Demosthenes and Alexander.

The Negro Races, a Sociological Study. By JEROME DOWD. The Macmillan Company, New York, 1907. pp. 493.

This volume is submitted as one of a series that the author has in mind which shall constitute a sociological study of mankind from the standpoint of race. Hitherto, writers have constructed theories based upon data selected very promiscuously from diverse ethnic stocks. This would have been well if the various races had lived in the same environment and passed through the same stages, but as they have been successive and not simultaneous, it is wrong. Zone itself makes the identical institutions or even stages impossible. The author therefore first attempts to prove that each race has its own distinctive institutions and special evolution corresponding to its habitat and he also seeks to discover the factors and laws that explain the moral characteristics and institutions of each racial division. The first part of the work deals with the Negritoes including pygmies, bushmen and hottentots; the second with the Negritians and Fellahs discussing the rest of the Soudan life in the zones of the banana, millet, cattle and camel respectively in each of which both economic, family, and political life are considered. There are also certain customs and ceremonials, certain traits of religious and æsthetic life, certain psychological traits due to the environment in each of these zones. The final chapter discusses the solution of the Negro problem in the Soudan. This book certainly strikes a new note or several of them which cannot fail to be very stimulating not only to historians and economists but also to psychologists.

Myths of the Red Children. Retold by GILBERT L. WILSON. Illustrated by Frederick N. Wilson. Ginn & Company, Boston, 1907. pp. 154.

Here are eighteen tales collected from perhaps a dozen tribes, well told and each with one or more illustrations true to life. The Supplement contains a number of Indian things that children can make such as stone hatchets, arrows, hunting shirts, moccasins, clay pots, bows, quivers, pipes, etc. It should be stated also that there are a few explanatory notes for each of the tales. Altogether the little volume must be pronounced an interesting and suggestive venture.

Geschichte der Autobiographie, von GEORG MISCH. Erster band. Das Altertum. B. G. Teubner, Leipzig, 1907. pp. 472.

The first part is devoted to the development of autobiography in the Hellenic and Attic period and the Roman Era. This is classified in their political life, the analysis of character and the relations to

philosophy and the religious movement. The golden age of autobiography in the close of antiquity is illustrated by church fathers, ending with Augustine.

The Quaint Comedy of Love, Wooing and Mating. Songs, lyrics, ballads and verses: an English, Scottish and Irish anthology. Edited by Duncan and August MacDougall. E. P. Dutton & Co., New York, 1907. pp. 348.

This the author regards as the first anthology of the poetic comedy of love. The writer claims to have gone through heaps of antiquarian chaff and to have followed many trails that led to nothing, but he has certainly unearthed a good many interesting and humorous things.

Country Homes and Gardens at Moderate Cost. Edited by Charles Francis Osborne. The Johns C. Winston Company, Philadelphia, 1907. pp. 120.

Here are 200 illustrations of plants and photographs of houses and gardens costing from $800 to $6,000 with the designs by well known architects and a practical discussion on the building and furnishing of homes by authoritative writers. Although there are many books of this kind published in recent years, this is doubtless on the whole the best.

Old Paths and Legends of the New England Border, by KATHARINE M. ABBOTT. G. P. Putnam's Sons, New York, 1907. pp. 408.

This is a really charming attempt to describe a number of typical old towns in New England,—the ancient Saybrook, Norwich, Easthampton, Sag Harbor, Deerfield, Northampton, Pittsfield, and others. There are a number of score of interesting illustrations that enliven the book.

Life and Labor of the People of India, by ABDULLAH JUSUF-ALI. John Murray, London, 1907. pp. 360.

The nucleus of this volume was a course of lectures delivered in England in 1905-06 at the Passmore-Edwards Institute. The original six lectures have grown to nine. They are town, village, student, civic and woman's life, the leisure classes, industrial and economic problems, public health, administration and social tendencies. The work has a few interesting illustrations.

Six Weeks Preparation for Reading Cæsar. Adapted to Allen & Greenough's, Bennett's and Harkness's Grammars. By JAMES MORRIS WHITON. Fifth revised edition with additions by Helen Isabel Whiton. Ginn & Co., Boston, 1907. pp. 105.

Carmen and Other Stories, by PROSPER MÉRIMÉE. Edited with notes and vocabulary by Edward Manley. Ginn & Company, Boston, 1907. pp. 251.

Saint Genest and Venceslas, par JEAN ROTROU. Edited with introduction and notes by Thomas Frederick Crane. (International Modern Language Series.) Ginn & Company, Boston, 1907. pp. 433.

Psycho-physic Investigations with the Galvanometer and Pneumograph in Normal and Insane Individuals, by FREDERICK PETERSON and C. G. JUNG. Reprinted from "Brain", Part CXVIII, Vol. 30, 1907. John Bale, Sons & Danielsson, London, 1907. pp. 66.

Manifesto of the Communist Party by KARL MARX and FREDERICK ENGELS. Authorized English translation. Edited and annotated by Frederick Engels. Charles H. Kerr & Co., Chicago, 1908. pp. 65.

Weeds and Wild Flowers, by MOWRY BELL. Richard G. Badger, Boston, 1908. pp. 119.

Goethes Wetzlarer Verwandtschaft, von ROBERT SOMMER. Mit 8 Abbildungen. Johann Ambrosius Barth, Leipzig, 1905. pp. 47.

Legends, Tales and Poems, by GUSTAVO ADOLFO BECQUER. Edited with introdnction and vocabulary by Everett Ward Olmsted. Ginn & Company, Boston, 1907. pp. 288.

Les plus jolis contes de feés. For elementary classes in French. Edited with vocabulary by Jules Lazare. Ginn & Company, Boston, 1907. pp. 130. (Modern Language Series.)

Les prisonniers du Caucase par ZAVIER DE MAISTRE. Edited with introduction, notes and vocabulary and French and English exercises, by Charles Wesley Robson. Ginn & Company, Boston, 1907. pp. 72. (Modern Language Series.)

French Song and Verse for Children. Edited by Helen Terry. With an introduction by P. A. Barnett and illustrations by P. Tempestini. Longmans, New York, 1908. pp. 125.

Skeletal Remains Suggesting or Attributed to Early Man in North America, by ALES HRDLICKA. Smithsonian Institute, Bureau of American Ethnology, Bulletin 33, Washington, Government Printing Office, 1907. pp. 113.

Report of the Progress and Condition of the United States National Museum for the Year Ending June 30, 1907. Smithsonian Institute. U. S. National Museum. Washington, Government Printing Office, 1907. pp. 118.

NOTE.

Adolf Harnack. at the 49th Annual Meeting of the German Philologists and Gymnasial Teachers in Basel, September, 1907, created, what is described in the German pedagogical journals, as real consternation, by proposing radical transformation of religious training in secondary education. For the higher gymnasial classes he would completely abolish the critical authoritative methods now in use and in their place establish courses based upon modern critical and historical methods. Only thus can this subject remain. Since, however, there are stages in the development of the pupils in which exclusively authoritative religious instruction has no place, and at the same time the modern critical methods would be premature, Harnack proposes for two years, in the middle of the course, to entirely omit this subject. For the four upper classes he would have a course in which the fourth should study the history of the religion of Israel and the Old Testament, the third the story of Jesus and primitive Christianity, the second should be introduced into Catholicism and early Protestantism, and the first should study the essence of religion and Christianity with special reference to the vital problems of the present. In conformity with this, he would have also courses established at the university to prepare teachers for this work. The speaker insisted that students knew extremely little of the nature of other confessions, and that this was a great defect of culture that must be remedied. The conceptions which Protestant youth hold of Catholicism are almost inconceivably crude. The knowledge of church history must be relied upon to remedy this evil.